# The American Artisan
## And Hardware Record

Vol. 53. No. 23. CHICAGO, JUNE 8, 1907. $2.00 per Year.



**BOLTS**

Of All Kinds. Nuts, Washers and Carriage Forgings.

**COLUMBUS BOLT WORKS,** COLUMBUS, — OHIO —

**IN THE FRONT RANK FOR 25 YEARS**

**"AMERICAN SEAL"**

ELASTIC OIL ROOFING CEMENT
STOVE PUTTY and ASBESTOS
FURNACE CEMENT

and the superior quality of these goods is still universally recognized.

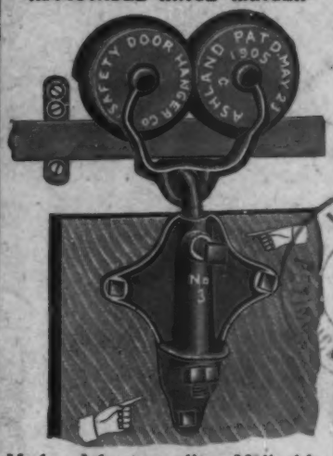
**THE WM. CONNORS PAINT MFG. COMPANY**
MAKERS
TROY, N. Y.

Western Agent
PERKINS ROOFING & SUPPLY CO.
235 Lake St., Chicago, Ill.

Southwestern Agent
STOCKHOFF SUPPLY COMPANY
107 N. Main St., St. Louis, Mo.

TRYING to do business without advertising is like winking at a girl in the dark: you know what you are doing but nobody else does.

**WIZARD**
ADJUSTABLE HINGE HANGER




Made of best quality Malleable Iron. The two sets of Steel Roller Bearings reduce friction and make an exceptionally easy running hanger. Lateral and vertical adjustment. No special track required. *Ask your jobber or write us.*

SAFETY DOOR HANGER CO.
Manufacturers
Ashland, Ohio. Hamilton, Ont., Can

**U. S. CLOTHES PINS**

Never rust, crack, split, or [illegible] the line.

Any special clips made to order.

U. S. CLOTHES PIN COMPANY
Montpelier, Vt., U. S. A.

**DELTA FILES**

TRADE MARK DELTA

DELTA FILE WORKS
CARVER File Company
PHILADELPHIA, PA.
An Independent organization not connected with the trust in any form, shape or manner.

FILES OF QUALITY

**CHAIN—Furnace, Damper or Ventilator**

**"TRIUMPH"**

ELEVEN times as strong as Jack Chain.
CUTS ARE EXACT SIZE

**"BROWN"**

CHEAPEST because they are the BEST

STRONGEST Chain in the World.

"Triumph" or "Brown"
MADE IN EITHER
Steel or Brass.
GET OUR PRICES.

MADE ONLY BY **THE BRIDGEPORT CHAIN CO., Bridgeport, Conn.**

# "Hurry Up The Cinderella Base Burners I Have People Begging for Them."

(Notation of an order received last Fall.)

**The Sale of the Cinderella Base Burners is Constantly Increasing**

We make them several styles in a variety of sizes—all are of one quality. Some are more lavish than others and are sold at a slightly higher price.

There may be Base Burners that have some few unimportant details that Cinderellas do not have.

But Cinderellas have some very important features that others do not possess.

They are all five-flued—giving them 40 per cent more Radiating Surface than the every day three-flued stoves.

This increased radiation increases their heating power and reduces the consumption of fuel to the lowest possible amount.

Cinderella Base Burners use from 2 to 3½ tons of coal in a long winter, the quantity depending upon the size of the stove and the space heated.

Cinderella Base Burners are Strong, Double Heaters and Powerful Circulators. Their circulating Flues have the same capacity as a 7 in. Round Pipe.

All the Nickel Work is plated on a Copper base. This is the most costly way of doing it. But by this means the most brilliant and durable nickel finish is obtained.

The Fire Pots lift out. The grates are the Ransom Duplex. The fitting is absolutely accurate. All the parts of any Stove of a given number will fit any other of our stoves of the same Name and Number.

We have certainly put the design, material and workmanship into these Stoves to make them the Equal of anything made in America and as such we again present them. Our prices are 10 to 20 per cent lower than you would expect—for they are "Made in Pittsburgh."

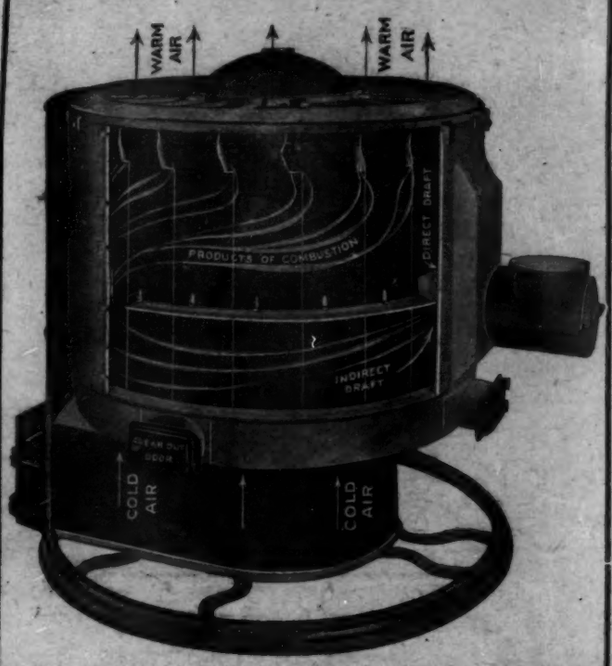
**FEATURES COMMON TO ALL**

Double nickel. Lift out fire pots
Ransom duplex grates. All are double heaters
All are five-flued

## Stove & Range Co. of Pittsburgh

**PITTSBURGH, PA.**






# Some Interesting FIGURES

That the KELSEY Warm Air Generator is entering a better class of buildings each year—doing work which an ordinary furnace could not satisfactorily handle—is evident from the fact that in the last three years our sales of the three largest sizes of KELSEY Generators show an increase of 36%.

The KELSEY System is being installed in a class of public buildings, such as schools, churches, libraries, etc., in which steam has hitherto been used almost exclusively.

At the same time, the KELSEY is today being used in many of the finest country homes, both in the United States and Canada.

Over in Canada, where they have pretty cold winters, sales of the KELSEY so far this year are nearly double those of last year for the same period.

All of this goes to prove that "the man who investigates buys a KELSEY."

And after one season's use, he is certain to spread the good news.

Take the Exclusive Agency in your vicinity now, and in a very few years, you will have a heating business yielding you not only a good profit, but the Good Will of your business alone will be worth a handsome figure.

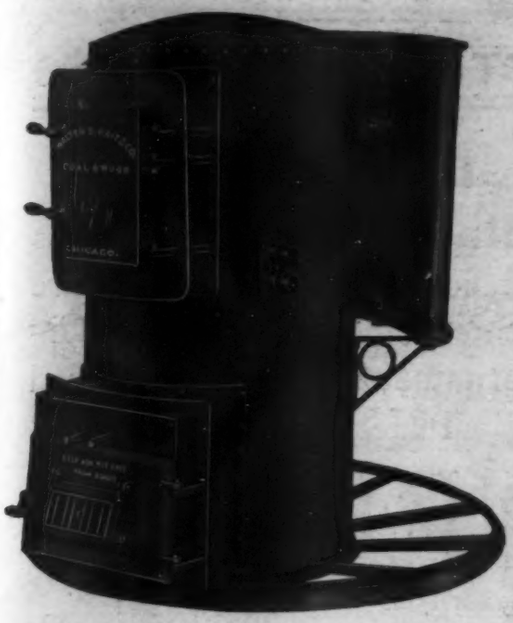
**May we send you our Exclusive Agency Proposition?**

## KELSEY HEATING CO., SYRACUSE, N. Y.

**New York City:**
**186 Fifth Avenue**

**VAN EVERA & LEWIS MFG. CO.**
**104-106 W. Lake St., Chicago**

**JAMES SMART MFG. CO., Brockville, Ont., Sole Makers for Canada**



All Steel Furnace

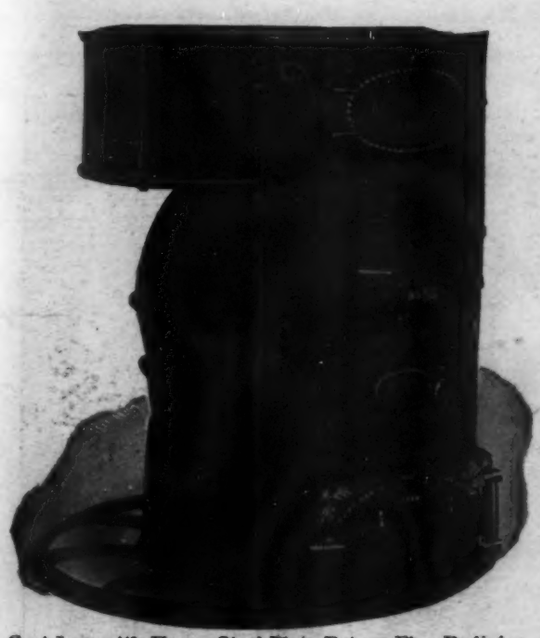
# NEW BLOOD!
# NEW IDEAS!
# NEW FIRM!
# NEW FURNACES!

A new and complete line of warm air furnaces—made in every style—for every fuel—and adapted for every climate—all cast iron—all steel—cast iron with steel radiator—all with one name—one style—one quality—THE BEST.

With a life long experience in furnace work, this complete new line embodies many practical improvements, and the entire line will carry the name of

# WALTER S. RAIT & CO.

which will be a synonym for all that is best in warm air furnaces.



Cast Iron with Heavy Steel Plate Return Flue Radiator
Also made with large feed door, 14x15 inches.

All Cast Iron, with Radiator cast in one piece.
Also made with large feed door, 14x15 inches

Write for our illustrated descriptive matter—learn our prices and you will WANT the AGENCY.

# WALTER S. RAIT & CO.

**Inventors, Designers and Manufacturers**

**211-213 Lake Street Chicago, Illinois**

STRICTLY FIRST-CLASS

# Mystic Economy

**Steel Range** is strictly first-class and embodies every desirable feature of modern construction. It is **thoroughly ornamented** with fine Nickel Plates and Elaborate Carving, up-to-date in every particular, and **nothing better** can be had for the money—considering construction, material and workmanship. *Illustrated catalog sent on request.*

**Comstock-Castle Stove Co.**

**Quincy, Ill.**

# VAN'S RANGE

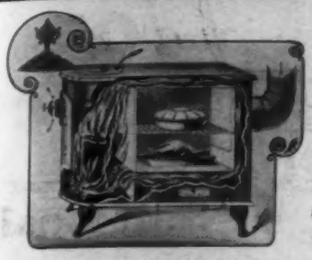
**Patent Improved Wrought Steel Portable**

For Hotels, Restaurants, Public Institutions, Boarding Houses, and Private Families. All kinds of Hotel Implements for culinary purposes. Manufactured and for sale by

**The John Van Range Company**

Southwest Corner
5th and Broadway

CINCINNATI, - - - - - OHIO



Your name on a postal brings Catalogs and full information

# Do a Paying Stove Business

We wish to tell every merchant who reads this ad. how he can make big money handling our **Wonderful Cosby Patent Bakers and Heaters.** No more useful or salable household article on the market.

**UNION STOVE COMPANY, Inc., 501 Mutual Bldg., Richmond, Va.**

***You Will Profit***
***BY SELLING***

# Peoria Lexington Steel Ranges

Made by skilled workmen of the VERY BEST ANTI-RUST PLANISHED STEEL. They have more points of general merit than any other range made. The "Peoria Lexington" is a

***Superior Modern Range***

embodying all the latest improvements of practical value to a Steel Range. Up-to-date in every respect. It is the BEST, MOST SUBSTANTIAL, MOST PERFECT OPERATING RANGE MADE. It is a range that will sell. It's ornamentation is sure to catch the eye and the many good features embodied in it WILL create in the prospective customer a WANT TO BUY

***The New Never-Break Oven Door***

(recently patented) is one of the Special Features of the Peoria Lexington Steel Range
Write for Printed Matter

**Culter & Proctor Stove Co.**

Hamilton and Water Street. PEORIA, ILLINOIS

**It Means Profit**—Dollars and Cents—not alone that but—**For You**

**YOUR RANGE BUSINESS WILL BOOM**

if you will sell

# THE WILLARD STEEL RANGE

It is not a cheap range but a good, honest quality range at a L-O-W P-R-I-C-E. A better range than you can get anywhere for the money. Durable—will last a lifetime. Economical—a fuel saver.

THE WILLARD STEEL RANGE is up-to-date in every respect, combining every possible improvement. It is bound to satisfy the purchaser, bound to sell, and the dealer that sells the "Willard" is bound to make a G-O-O-D P-R-O-F-I-T. Write and I will make you the greatest (most profitable) proposition ever offered.

YOUR OWN NAME PLATE ON RANGES ON ORDERS OF TEN OR MORE

**WM. G. WILLARD,** Room No. 28 Willard Bldg., (316 CHESTNUT STREET) **St. Louis, Mo.**

# The Novelty Warm Air Furnace System

An absolutely sure and correct method of securing the best and most healthful results in heating and ventilating residences or other buildings. Approved by Heating Engineers, Architects and Physicians.
Do **you** wish to **know** more about it?

**The Novelty Furnace Handbook will tell you**

# ABRAM COX STOVE COMPANY

15 to 19 West Lake St., Chicago
No. 6 Portland Street, Boston

American and Dauphin Sts., Philadelphia

PUBLIC AUCTION OF CAHOONE PATENTS FOR STOVES AND RANGES burning soft coal.

The undersigned, Receiver of the Federal Stove Company, under an order of the Court of Chancery of New Jersey, will sell, at public auction to the highest bidder, on the conditions which will be furnished to parties interested, upon request, United States patents Nos. 550865, 582174, 698630, 11810; Nos. 698796 to 698810 both inclusive; Nos. 742161, 775328, 763851 and 529376; Canadian Patents Nos. 73118, 64305, 76136, 92308 and 92309; and Cuban Patents Nos. 1772 to 1792 both inclusive. Assignments of the above patents not yet recorded, have been executed by the officers of the said Company to its receiver. Sale will be held July 15, 1907, at 2 p. m., at the office of

Alfred F. Stevens,
Receiver of the Federal Stove Company.
738 Broad Street, Newark, N. J.

Bids May Be Made By Mail.

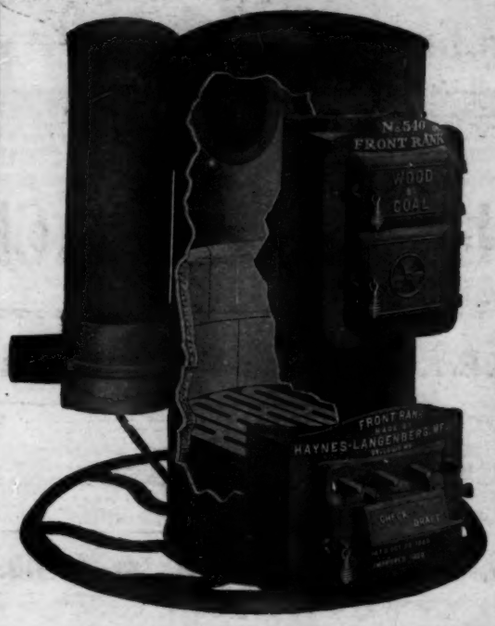

# Lion Furnace

**Can use Hard or Soft Coal**

Giving the
**GREATEST HEAT**
with the
**LEAST FUEL**
Pot interchangeable with our
**APEX FURNACE**
Durable, simple in construction and a
**FINE SELLER**
Write today for catalogue.
Rood & McIntyre, Kansas City, Mo.
Southwestern Distributors

**YOUNGSTOWN FURNACE & SUPPLY CO.**
YOUNGSTOWN, OHIO
Chicago Office, 211-213 Lake Street

# Front Rank Furnaces




Are growing more popular **every day.** The increased business necessitated a **New Factory.** We are building it. **33,000 ft.** of floor space, equipped with the **best** and **latest machinery.** Get in the **Band Wagon** and order the Front Rank Steel Furnace.

**Haynes-Langenberg Mfg. Co.**
ST. LOUIS, MO.

# A Money-Making Proposition

TO sell the **O-HI-O** Steam Cooker and Baker means **"TO MAKE MONEY."** The O-HI-O Cooker through an extensive advertising campaign, is being made known to more than **TEN MILLION WOMEN** who are interested in just such a time, labor and money-saving device that will reduce their fuel bills.

Through this advertising we are receiving thousands of inquiries from every town in the country and (if we have a local dealer) these inquiries are immediately referred back to the local dealer. Our advertising is creating such a demand for the O-HI-O Cooker that we need more dealers to sell it. Many have already taken up the sale of the "O-HI-O" and they say it's the best selling Cooker. Pays the largest profit.

The O-HI-O is the best—most perfect cooker on the market today.

**There is no reason on earth why you should not sell the "O-HI-O."** Other dealers are making money on the "O-HI-O," and you can do the same.

Fine electrical display stand, display cards and literature furnished all dealers.

*SEND FOR OUR CATALOGUE.*

**THE O-HI-O COOKER CO., 531 Jefferson Ave., Toledo, Ohio**

# "GET OUT OF THE RUT"

**INCREASE YOUR PROFITS!**

Nothing in years has made such a wonderfully pronounced impression in the trade as our

## Dealers' Advertising Campaign

Let us tell you how it helps you. Let us tell you how you can increase your profits and your satisfied customers by selling

## THE IDEAL Combination Steam Cooker and Baker

Show us a dealer who has made a big and lasting success, and we will show you a dealer who is always on the alert for new and useful things for his customers.

Our advertisement will be read in the leading publications every month by over **24 million women.**

Our advertising is bringing hundreds of inquiries from every state. These inquiries are immediately referred to the local dealer.

**WRITE TODAY FOR CATALOGUE AND PRICES**

## The Toledo Cooker Co., 1300 W. Bancroft St. Toledo, O.

THE

# HOLLAND FURNACE

HAS A

**DOUBLE AIR ADMITTING FIRE-POT**

WHICH

**Burns all Gases**

FOR

**Economy, Durability and Simplicity of Operation**

THE

## HOLLAND HAS NO EQUAL

Our 1907 Catalogue for the asking

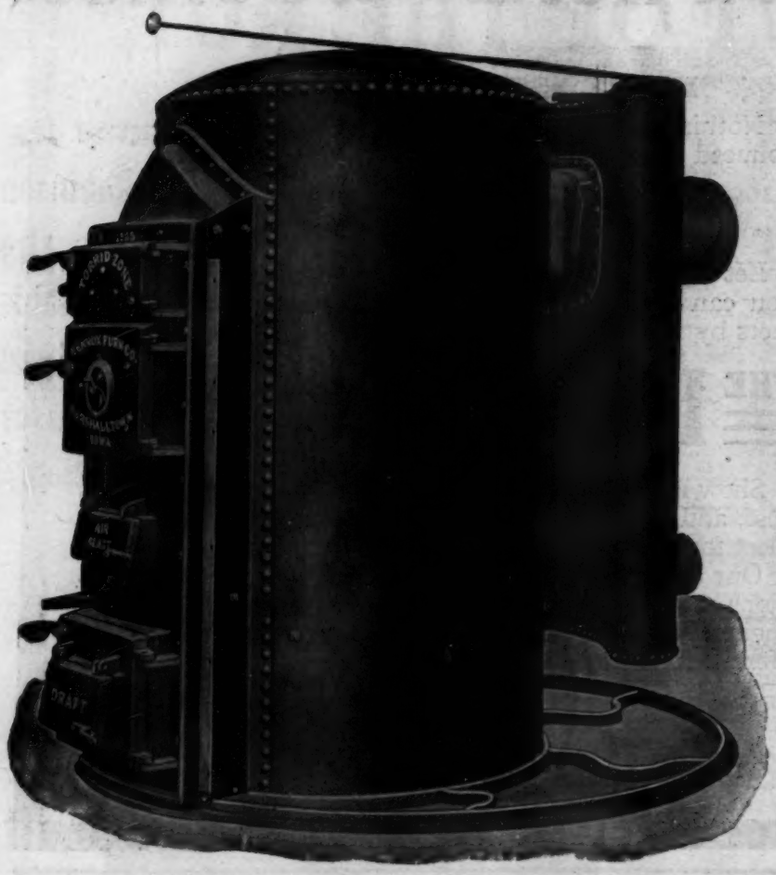
## HOLLAND FURNACE CO.

HOLLAND, MICH.

***To the AMERICAN ARTISAN:*** ***April 13, 1907.***

***I find your paper the best to advertise in. Thanking you for the ed, I am Yours truly, J. J. SPOHN, Rockefeller, Ill.***

# Large Radiating Surface Important



It is the radiating surface which determines the amount of heat a furnace is going to get out of the fuel used. The size of the fire pot determines the amount of fuel a furnace will burn.

## Lennox Torrid Zone

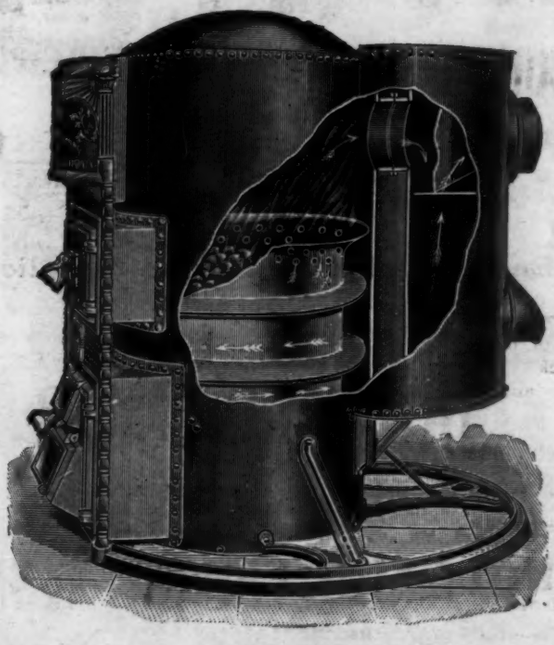
steel furnaces have very large radiating surface nearly doubled in area by the extra indirect radiator through which the hot smoke is made to pass for eight feet of smoke travel. A hanging partition in this radiator causes the smoke to descend within eight inches of the bottom of the radiator before passing up the other side. This is longer smoke travel than any other furnace has and is possible only by reason of the convenient direct and indirect draft change. In Torrid Zone furnaces the indirect draft does not have to be strong enough at all times to permit of opening the fuel door for the direct draft can be had at one pull of a damper rod. Thus when fuel door is closed and damper is turned for indirect draft more of the hot gases can be held back from escaping up the chimney and used as fuel. This makes Torrid Zone furnaces fuel savers. It is only one of the many great selling points of this furnace.

**WRITE FOR 40-PAGE CATALOG**

**Lennox Furnace Co.**

**Marshalltown, Iowa**

# A WARM FRIEND



# The WEIR

**All Steel**

**Gas and Soot**

# Consuming Furnace

**MADE BY**

# THE MEYER FURNACE CO.

**PEORIA, ILL.**

# The Robinson Hot Blast Furnace

Corrugated Dome.
Cast Radiator
Made of Cast Iron.
Strong. Durable.
Gas-Tight
Throughout.

The distinctive features in the Robinson Line assure to the Dealer a reasonable margin, and to the user Satisfaction.

SEND FOR CATALOGUE

SEND FOR CATALOGUE

## Robinson Furnace Co., 107-9 Lake St., Chicago, Ill.

1849 **BOYNTON** 1907

BOYNTON'S PATENTED SQUARE POT

## Warm Air Furnaces

### Hot Water Heaters and Steam Boilers

CRUSADER

Have stood for an honest value for nearly sixty (60) years—more than half a century. Their reputation has a firm foundation. They were the best then, they ***are the best now. Always first*** with every ***real improvement.***

***Boynton Furnaces*** are made of cast iron or steel plate, or combination of both—portable or brick set—for hard or soft coal, wood, lignite, or any fuel, and are adapted for any climate.

**The New Patent Square Firepot Found in all Boynton Furnaces.**

ADMIRAL

***Boynton Furnaces*** have built a ***reputation*** for many dealers and they will do the same ***for you.***

**DO YOU WANT** ***To build*** a reputation for yourself ***To increase*** your business ***To satisfy*** your customers **SELL THE BOYNTON**

**Catalog and Prices Cheerfully Sent on Request**

**THE BOYNTON FURNACE COMPANY, 147-149 Lake St., Chicago**

J. H. MANNY, C. E. MANNY, Chicago Managers — NEW YORK OFFICE, 207-209 WATER STREET

PACIFIC COAST AGENTS:
J. C. BAYER FURNACE CO., Portland, Ore. FINLAY & ROBB, Seattle, Wash. WM. BROWN, Spokane, Wash.
HOLBROOK, MERRILL & STETSON, San Francisco, Calif.

# The Horse-Shoe Radiator

Notice the dome with the outer return flue or horse-shoe radiator. It is high enough to give an extra large combustion chamber and at the same time make the furnace low enough for shallow basements. Ample space is left between the dome and the inner circle of outer radiator.

## Floral City Capitol Furnace

**It is heavily constructed. No flimsy or light material is used. The body and radiator are made of No. 10, No. 8 and No. 6; not No. 16 and No. 20, as most furnaces. Where the products of combustion pass from the body into the outer radiator, a solid cast iron plate instead of steel is used.**

**Get our latest catalog—new.**

**Monroe Fdry. & Furnace Co., MONROE, MICH.**

*Dealers Who Are Selling The*

# NEW AKRON
## AIR BLAST FURNACE
### CONTROL THE TRADE

The NEW AKRON AIR BLAST embodies all the GOOD FEATURES of the old original and many new ones. You can not afford to handle any other furnace when you can get the AKRON AIR BLAST. Read the testimonials from parties who have used the furnaces from 15 to 17 years.

1890 **A WELL PLEASED CUSTOMER.**

MAY & FIEBEGER. Akron, O., April 4, 1907.

Dear Sirs—After having tested one of your Akron "Air Blast" Furnaces for the past seventeen years, I am pleased to inform you that it has always given entire satisfaction and comfort. My furnace was one of the first Akron Air Blasts on the market.

The expense on the furnace has been comparatively small. With the exception of possibly two or three smoke stacks and a few other incidentals, I have had no expense since it was first installed in the Fall of 1890. The Fire Pot and Grate are apparently as good as new and are good for several years to come.

I can fully recommend the Akron Air Blast Furnace as being a Self-Cleaning Furnace and a most powerful heater, not being cleaned in seventeen years.

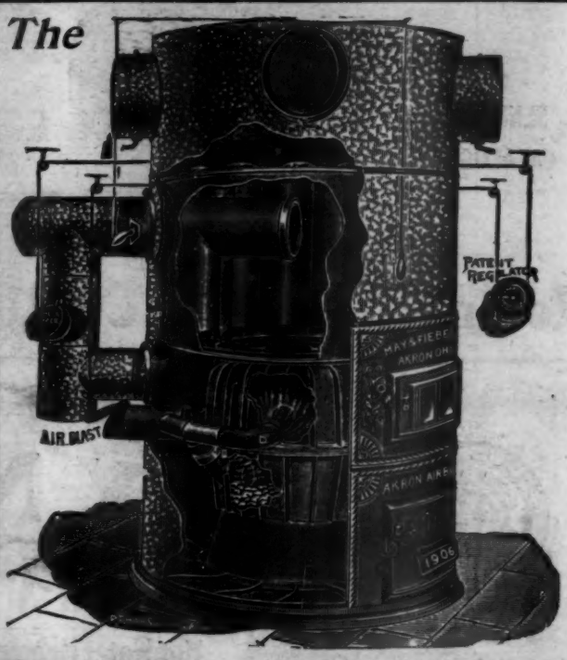
As to consumption of fuel and ease of management of furnace, has proved itself all that could be desired.

The Akron Air Blast Furnace well deserves the success it has attained.

Very sincerely, GEO. F. FRICKER.

*Send for Catalogue and Prices to the Manufacturers*

**MAY & FIEBEGER, Akron, Ohio**




# BOOMER FURNACES

## Quickly Establish a Local Reputation

It is always a little hard to introduce an old Furnace in New Territory.

But the first BOOMER Furnace you sell will pave the way for an unlimited profitable furnace business.

It is likewise better to take an old, time-tried furnace like the BOOMER, and sell it in new territory, than to continue selling, or endeavoring to sell, a Furnace that does not "stand up" the way you would like to have it.

The BOOMER Furnace is one of those always-reliable, sure-to-give-satisfaction commodities that is a genuine pleasure to sell.

The BOOMER Agency, remember, has attractive inducements.

We'll gladly send you our Furnace catalogue upon request.

**The HESS-SNYDER COMPANY**

**Manufacturers MASSILLON, OHIO**

# GILT EDGE BADGER FOR HARD COAL

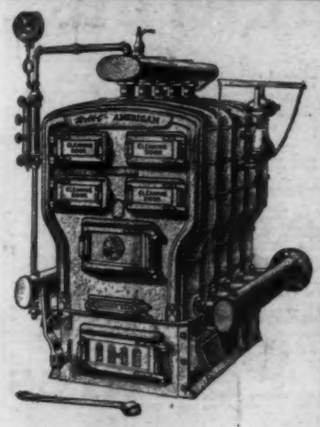
**COMBINES ALL THE FEATURES**
necessary to make it a most convenient perfect working and economical furnace.

**CAST FIRE SECTION**
with steel dome and return flue radiator.

**PERFECTLY BUILT**
and perfectly mounted and having the best of all modern conveniences. Made in 20, 23, 26 and 29-inch fire-pots.

CATALOGUE ON APPLICATION

**R. J. SCHWAB & SONS' CO.,**
MILWAUKEE, WIS.



SPECIFY
**Klymax Boilers**
and
**Kewanee Radiators**

KLYMAX Boilers are built to meet the demand for a boiler of highest grade material and workmanship, combined with simplicity of construction and operation.

Manufactured by
**Kellogg-Mackay-Cameron Co.**
CHICAGO

Economy, Cleanliness and Durability all combined in the

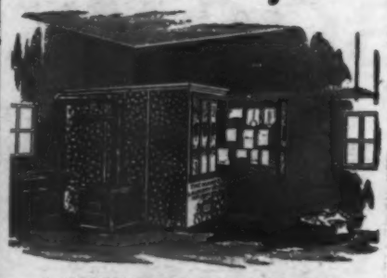
# MONCRIEF
## WARM AIR FURNACE

A few of the many good points of the MONCRIEF
- All Cast Iron
- Moncrief Duplex Grate
- Large Radiating Surface
- Top Return Flue
- Double Fire Pot
- Large Grate Surface

**HENRY & SCHEIBLE CO.**
825-29 Long Ave., N.W. CLEVELAND, O.
Western Sales Agent—J. C. KIMMEL, 3314 E. 15th St., Kansas City, Mo.

HEAT LIGHT
FOR THE
HOME
STORE
HOTEL
SCHOOL
CHURCH
OFFICE
COLLEGE
THEATRE
FACTORY
VILLAGE
INFORMATION FREE
SEND FOR IT.
DETROIT HEATING AND LIGHTING CO.
DETROIT MICH

# The "Manest" Family Clothes Dryer

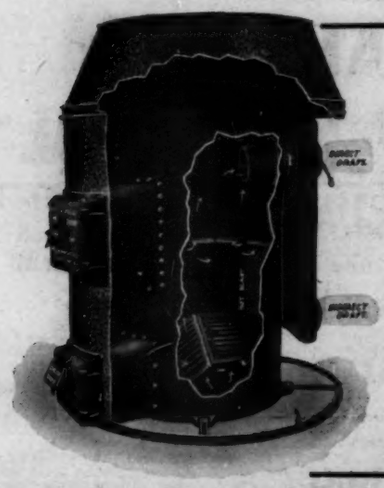


**A LAUNDRY STOVE AND DRYING CABINET COMBINED**

ONE FIRE
**Boils the Clothes**
**Dries " "**
**Heats the Irons**

FOR RESIDENCES, APARTMENT HOUSES, INSTITUTIONS, HOTELS, ETC.

Manufactured by
**The Mannen & Esterly Co.**
CLEVELAND, OHIO



# Thirteen Years' Experience

**IN MAKING AND INSTALLING STEEL FURNACES**

This experience puts us in a position to guarantee the best that money can produce.

Our catalogue contains valuable information that every Furnaceman needs.

Sent FREE on application. You cannot afford to do without it.

County and State Agencies open for responsible dealers.

**THE STANTON HEATER CO.,**
**Martins Ferry, Ohio**

# DON'T EXPERIMENT AT YOUR OWN EXPENSE

All MUELLER Furnaces have been thoroughly tested to prove their efficiency, thus avoiding experiments at the expense of the purchaser.

No expense or labor is spared in the selection and distribution of the materials entering into the manufacture of

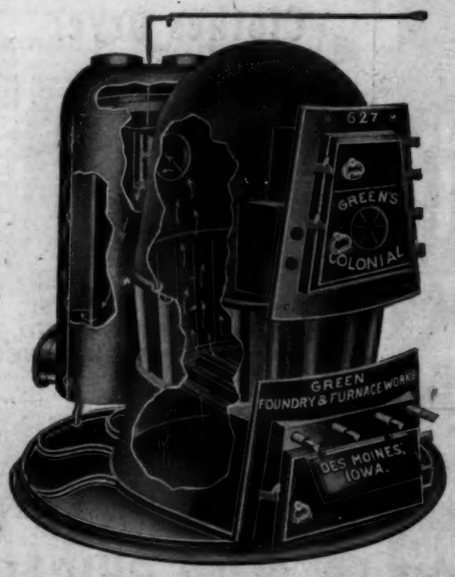
# MUELLER HEATERS

Over 45,000 in use—doing good service—many of them have been in use for more than 25 years.

Get our catalog and prices.

**L. J. MUELLER FURNACE CO.**
**191 REED STREET** **ESTABLISHED 1857** **MILWAUKEE, WIS.**

# A Furnace With Special Features




Which will appeal to your customers with a big margin of profit is what you are looking for. Why sell a Furnace almost like your competitor's? A man to make money must get a specialty and push it. It costs no more than any good furnace and sells a great deal easier.

# GREEN'S COLONIAL FURNACE

***Hot Air Blast Fire Pot*** which allows the heated air to pass into and over the fire, converts the gas and smoke into heat ***reducing coal bills.***

***Double Feed Doors*** which admit large chunks of coal.

***Long Distance Heating*** by means of the oval opening through the center of radiator. The rooms fartherest from the furnace can be as easily heated as rooms with short runs. Heavy radiator with ***long smoke travel,*** provided with ***direct draft*** and cleanout.

Grate bars ***each operating independent*** of the others, three outer supports instead of one inner support; ***deep ash pit, large combustion chamber; water coil pocket; one-piece base ring; large hot air chamber. Heavy, Durable, Economical.***

**WRITE FOR DISCOUNTS! ORDER A SAMPLE**

**Green Foundry and Furnace Works, (Dept. A) Des Moines, Iowa**

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☞ The publisher of THE AMERICAN ARTISAN will take pleasure in supplying Books, of whatever character, at catalogue prices, prepaid by mail, to any address, on receipt of price. The following are in lines especially represented by this journal.

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### GRAY'S PERFECT ELBOW PATTERNS.

On heavy blue print paper. From one inch to twenty inches; price $1.50, prepaid. From twenty inches to forty inches, price $1.50, prepaid. From one inch to forty inches, made in 2, 3, 4, 5, 6 7 and 8 pieces with 160 patterns and angle chart showing all angles and degrees of same gotten from 160 patterns, price $3.00, prepaid.

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### PLUMBING, DRAINAGE AND WATER SUPPLY

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### PRACTICAL HINTS ON JOINT WIPING.

For beginners in plumbing. Price, 25c.

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### THE MANUAL OF BUSINESS.

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**DANIEL STERN, PUBLISHER AND BOOKSELLER, 69 DEARBORN STREET, CHICAGO**

# REGISTERS

Semi-Steel Floor—Cast Iron Floor
Wrought Steel Special Side Wall
Cast Iron Special Side Wall

**We make them all—in all finishes**
**Get our prices before buying**

ESTABLISHED 1857

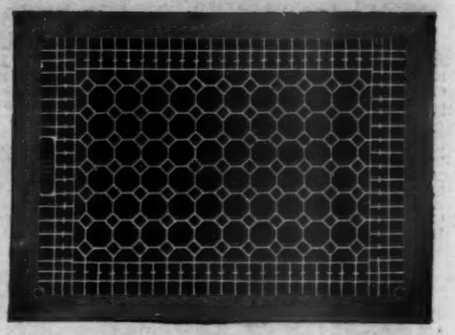
**L. J. MUELLER FURNACE CO., 191 REED STREET, Milwaukee, Wis.**

# Ferrosteel Registers

**The only house in the world manufacturing**

**CAST IRON FLOOR**
**SEMI STEEL FLOOR**
**WROUGHT STEEL FLOOR**
**CAST IRON SPECIAL SIDE WALL**
**WROUGHT STEEL SPECIAL SIDE WALL**
**FLAT OR CONVEX EXTRA SHALLOW SIDE WALLS**
**DEFLECTORS, PANCAKES, WAFERS**

**In all Designs and Finishes.**
**Mechanism Perfect.**
**Capacity Greatest.**
**Finish Unsurpassed.**
**No reputable line can undersell us.**



Moorish Design

**Ferrosteel Company, Cleveland, Ohio**

Fig. 67

We are prepared to ship you at once

# Perfection Pipe and Fittings

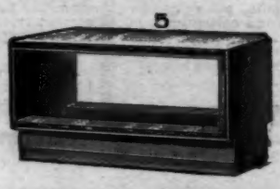
Registers, Baseboard, Pancake, or Floor, in Japanned, OX., Copper or Nickel Plated.

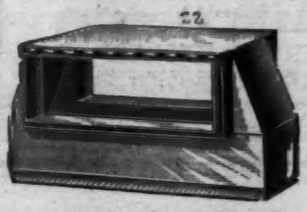
**Send for Catalogue and Let Us Quote You Prices**

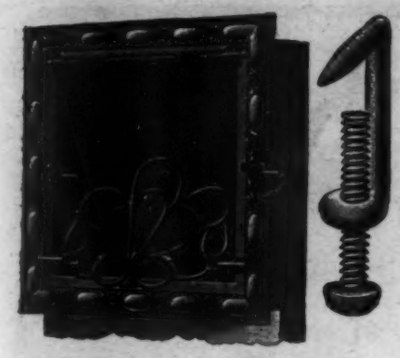
## The Perfection Furnace Pipe Co.

**600 Broadway, TOLEDO, OHIO**

Fig. 76





Hold Fast Hook and Bolt Device
Patent Pending

## North Pole Discovered!

Seen the news ?
And how it did occur ?
Exploring party took along
A Symonds Register.

The ice did melt, the ship did float,
With one heroic spur
The sailors shot right to the pole
With Symonds Register.

Let's shout once more for our country,
One great, grand, loud hurrah;
Our nation's free, o'er land and sea,
With Symonds Register.

*Write the Explorers*

**SYMONDS MFG. CO., EAST ST. LOUIS ILLINOIS**

Large 10 oz. Can.

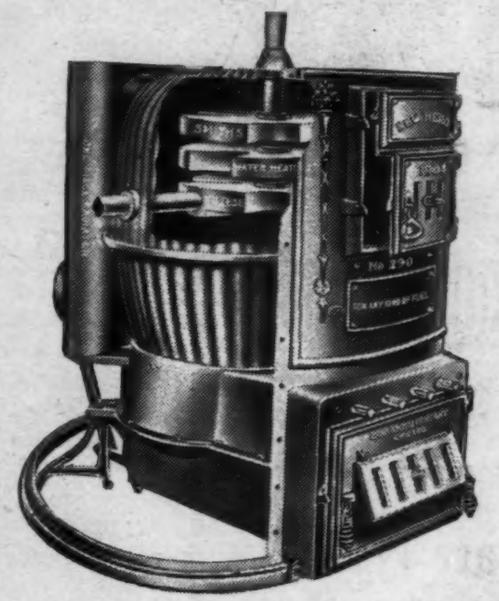
## We Make It!

**The BEST Air Drying Iron Enamel Made.**

**Try a 1-Dozen Case From Your Jobber**

**Nickel Plate Stove Polish Co.,**
**CHICAGO.**

# The New Hero



## and Smith's Maltese Heaters

A combination that will take care of **1,000 feet of radiation,** and give complete satisfaction too.

**CHAS. SMITH CO., Chicago**
**101 East Lake Street**

**Our Auxiliary Heaters Go In Any Furnace**

*"They Differ From Others"*

# Improved Jones Registers

Are made under the personal supervision of practical furnace men who are familiar with the needs of the trade.

***Absolutely Fireproof***

With double metal box and ventilating air space between the inner and outer casing. They are

***Absolutely Noiseless***

The deflector which divides the flow of air **does not** rattle when adjusted. A furnace installed in connection with

***The Improved Jones Register***

will give better satisfaction with less fuel

*Send for printed matter which fully describes this register.*

Manufactured by

**United States Register Co., Ltd.**
**BATTLE CREEK, MICH.**

**BRANCHES:**
**104 2nd Street, N., Minneapolis, Minn.**
**732 King St., West Toronto, Ont., Can.**

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*To the Publishers*
**The American Artisan and Hardware Record**
**69 Dearborn Street, CHICAGO**

Please send us THE AMERICAN ARTISAN each week for three months. At the end of that time we will remit Two Dollars for one year's subscription, or 50 cents in case we decide to discontinue.

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ADDRESS _____
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STATE _____

# ROUND OAK

## STANDARD OF AMERICA

We print by permission a few words about the now well-known Incomparable Round Oak Chief Steel Range.

"I have great satisfactions with your stove to cook by. If any one had told to me that I could sell such in this county—I would then laugh. Your agent say—try—all right. I take one. I have sold nine. I am six more to receive. It is not enough. I am certain you will have again orders."

The above, it seems to us, speaks stronger than anything we could possibly say for the Chief. It pleases the merchant—it pleases the user. "It is a seller," an unqualified success. We want to place an agency for its sale in towns where we have none. Stove merchants—attention! It will pay you to write us about it and get the prices and the Book.

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**P. D. BECKWITH**

(Incorporated)

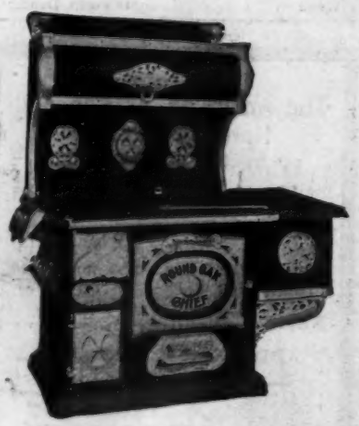
FRED E. LEE, Pres. and Gen. Mgr.

DOWAGIAC, MICHIGAN

Makers of Good Goods Only

*"What do you think of that, Fritz?"*

*"It's pretty good, but we could beat it, Doe-Wah-Jack. Take my animals and a big tent, then show the only genuine Round Oak Stoves, Ranges and Furnaces in three rings, and we would have a warm performance, wouldn't we?"*



ESTABLISHED 1880.

THE AMERICAN ARTISAN & HARDWARE RECORD

Representative of the Stove, Tin, Hardware, Heating and Ventilating Interests.

PUBLISHED EVERY SATURDAY.

TERMS OF SUBSCRIPTION IN THE UNITED STATES AND ITS POSSESSIONS. (Invariably in advance): ONE YEAR, POSTAGE PAID, $2.00. IN FOREIGN COUNTRIES INCLUDING CANADA, ONE YEAR, POSTAGE PAID, $4.00.

Address all Letters, Communications, and Remittances to

DANIEL STERN, PUBLISHER AND PROPRIETOR,

69 DEARBORN STREET, CHICAGO, ILL.

Entered at the Chicago Post Office as Second Class Matter.

THIS PAPER IS A MEMBER OF THE CHICAGO TRADE PRESS ASSOCIATION.

CHICAGO, JUNE 8, 1907.

ON to Richmond!

WHO would have believed that there could possibly be so many different opinions about the weight of the ton?

SHINGLES are up in the air, as far as the price thereof is concerned—in fact they are too high up to put on the roof. Try tin instead.

HERE'S hoping that the hardware manufacturers and jobbers who gather at Richmond, Virginia, next week will have a good and profitable time.

THE Commercial West, the leading financial paper of the Twin Cities, finds in the continued prosperity of the United States Steel Corporation a good omen of a generally successful year. If you want good times you must talk good times.

THE amount of money in circulation in the United States has nearly quadrupled in the last 28 years. On January 1, 1879, the amount was $816,266,721, while on the first day of the present month it was $2,939,782,569, or a circulation per capita of $34.20 on the basis of a population estimated at 85,956,000.

IN A recent newspaper interview Mr. Charles M. Schwab was asked whether in his opinion there is any danger of Pittsburgh losing its supremacy as the center of the steel industry. He answered "Never!" but the chances are that he gave a serious thought to Gary, Indiana, with its magic name, its favored location and its mighty possibilities.

"WE ARE on the eve of a development such as the world has never seen," said Andrew Carnegie recently to H. N. Casson, who records the remarks in Munsey's. "We have only begun to show the world what we can do," said Mr. Schwab. E. H. Gary said: "Sooner or later the whole nation will share Mr. Morgan's confidence in the future prosperity of steel." And Mr. Morgan himself said: "The next six years will show even greater success and prosperity than the last six years." Truly these captains of the steel industry are optimists all.

**The Weight of the Ton.**

MANY of our readers have expressed their surprise at the diversity of the opinions expressed by our correspondents whose letters on the subject of the long and the short ton we have recently printed. Few persons apparently realize what an important matter the varying weights of the ton really present for consideration, but there is no lack of such realization in the government department at Washington which has to do with our weights and measures.

The laws of the various states and of the United States concerning weights and measures were compiled not long ago under the auspices of the Bureau of Standards and in the introduction to this compilation we find the following:

"The ton of coal is in some states fixed at 2,000 pounds and in others at 2,240 pounds. The barrel varies from 29 gallons liquid measure or 100 dry quarts in New York to 42 gallons liquid measure in Texas, and so on. This diversity causes confusion in the commerce between the different states. That there is need for authoritative definition by weight is made evident by the fact that Congress has found it necessary to specify the number of pounds of certain commodities in a bushel. These values were adopted by Congress solely for use in the customs service and do not supersede the state laws, from which they often differ.

"In view of the confusion resulting from the diverse and conflicting laws in regard to our customary weights and measures as shown by this compilation, it would seem that some action tending to their improvement should be taken either by Congress or through the joint action of the states."

The great diversity of the laws concerning weights and measures can only be fully realized after studying the government compilation referred to, but a perusal of the letters which have been published by THE AMERICAN ARTISAN in its symposium on the subject—some additional letters also appearing in our present issue—will convince almost anyone that there is need of the standardization of the ton in the U. S.

**A Tip for the Tin Roofer**

IN THE present condition of the market for roofing shingles there is a good opportunity for the tin roofer and it should be his business to make hay while the sun shines. One method of making hay will be to note the fact that roofing shingles are now so scarce and expensive as almost to prohibit their use and this furnishes a strong argument for the metal roofer to use.

Iron and tin as roofing materials will surely go to the front under existing conditions as regards shingles. The price of red cedar shingles recently jumped 50c per thousand feet in one day, and the present

prices of such shingles for Chicago delivery are $4.33 for "clears" and $3.71 for "stars," as compared with $3.18 and $2.81, respectively, on the same date a year ago. The price of roofing shingles fluctuates from day to day almost like the price of wheat and all the recent fluctuations have tended to higher prices.

It is not only the fact that roofing shingles are expensive that can be used to advantage by metal roofers, but the further fact that they are also extremely scarce. The reports of the Census Bureau show a decided decrease in the quantity of lumber produced in lumber states like Wisconsin. The red cedar shingles, which are most highly esteemed, coming from the Pacific coast at a large expense for freight, it will readily be seen that herein lies a chance for the sheet metal roofer to get busy. The excuse for the existing high price of red cedar shingles is that car shortage in the West prevents prompt delivery and that the lumber trade is unable at the present time, when the roofing season is on, to obtain supplies.

To all our friends in the metal roofing trade we would say that this is an opportunity which should not be neglected. Added to recent improvements in the conditions pertaining to the supply of roofing tin, and taking into consideration also the adoption of standard specifications for tin roofing, the present season should be an especially good one for the tin roofer. The sun is shining and we sincerely hope that he will make plenty of hay.

As one of the most potent arguments in favor of tin for roofing purposes the sheet metal worker can point to its vast superiority over shingles from the standpoint of fire protection. As a practically fireproof roofing material it can be urged upon the customer with perfect confidence that it will "make good."

---

**Our Trade with Germany and France.**

STATISTICS of our trade with Germany and France in the last fiscal year show that it aggregated about 572 million dollars, and in the year which ends with next month it seems likely to reach nearly or quite 700 millions. About three-fifths of this large total trade occurred with Germany and about two-fifths with France.

In the trade with Germany, exports to that country are much greater than the imports therefrom, but in the case of France the exports are slightly less than the imports. In the nine months of the present fiscal year for which the Bureau of Statistics at Washington is able to supply detailed statements, the exports to Germany were 207 million dollars and the imports therefrom 123 millions in value, while in the same period the exports to France were 91 millions and the imports therefrom 99 millions, these figures being in round terms.

France is one of the few important commercial countries of the world to which our exports are less than the imports drawn therefrom. In the last ten fiscal years the imports from France have amounted to 783½ million dollars and the exports thereto 783 millions; in the same period imports from Germany amounted to 1,047 millions and the exports thereto 1,826 millions.

Of the 135 million dollars' worth of imports from Germany in the fiscal year 1906, 71½ million dollars' worth was manufactures ready for consumption, 32 millions manufactures for further use in manufacturing, 23 millions crude materials for use in manufacturing, 5 millions foodstuffs partly or wholly manufactured, and a half million dollars' worth foodstuffs in a crude condition. Of the exports to Germany, amounting to 232 million dollars in 1906, crude materials for use in manufacturing amounted to 112 million dollars; foodstuffs partly or wholly manufactured, 44 millions; manufactures for further use in manufacturing, 34 millions; manufactures ready for consumption, 22 millions, and foodstuffs in a crude condition, 20 millions.

In the trade with France the imports therefrom were 108 million dollars in value, of which 58 million dollars' worth was manufactures ready for consumption, 17 millions crude materials for use in manufacturing, 16½ millions manufactures for further use in manufacturing, 12½ millions foodstuffs partly or wholly manufactured, and 2 1-3 millions foodstuffs in a crude condition. Of the exports to France, amounting to 96½ million dollars, 53 million dollars' worth was crude materials for use in manufacturing, 18 millions manufactures for further use in manufacturing, 12 millions manufactures ready for consumption, 7½ millions crude foodstuffs, and 5 1-3 millions foodstuffs partly or wholly manufactured.

Of the exports to Germany raw cotton amounted to 101 million dollars; lard, 19½ millions; copper ingots, 17½ millions; corn, 12 millions; mineral oils, 8½ millions; iron and steel manufactures, 7½ millions.

The exports to France, amounting to 96½ millions, included raw cotton, 45 millions; copper ingots, bars, etc., 12¾ millions; refined mineral oil, 4 millions, and iron and steel manufactures, 3 1-3 millions.

Both Germany and France are our good customers, as well as being our great and good friends.

---

## RANDOM NOTES AND SKETCHES.

BY SIDNEY ARNOLD.

Here is a slight contribution to the gayety of nations for which an Australian paper, Life, of Melbourne, is responsible:

A fly and a flea in a flue
Were imprisoned, so what could they do?
Said the fly: "Let us flee."
Said the flea: "Let us fly."
So they flew through a flaw in the flue.

Any furnace man who can repeat this verse rapidly ten times without getting the fly and the flea and the flue all tangled up will be entitled to a free copy of N. G. Neere's famous work on "Heating Apparatus and Drafts."

* * *

I have had occasion heretofore to throw bouquets at the poet who burns the midnight oil in the interest of Iwan Brothers, the enterprising firm of hardware specialty manufacturers in the lively town of Streator, Illinois, and I am glad to record on this imperishable

page his latest contribution to the gayety of nations. When it reached me in a booklet called "Easy Digging," this priceless poem was surrounded by a heavy blue border, but you will not have the blues when you have read it through. Kindly remove your hats and read the Iwan poet's latest:

Shooting post holes in the ground
With a shotgun isn't quicker
Than the way they do it now
With the Iwan post hole digger.

It beats everything that's out,
On the farm it cuts a figure;
There's small work in making holes
With the Iwan post hole digger.

Light and simple! My, oh! my!
How it works! Well, I should snicker
You'll sell post holes ready made
If you have the Iwan digger.

It lifts every bit of dirt!
Nothing takes the core up slicker.
Why, it's only fun to work
With the Iwan post hole digger.

It makes wells, if these you need;
Sizes small or sizes bigger,
And as deep as you desire—
All things does the Iwan digger.

It is easily worked, you see;
Boys who have but little vigor
Think it is most charming sport
Making post holes with this digger.

Nothing like it in the world;
Ask of any wire-fence rigger,
And he'll tell you his best aid
Is the Iwan post hole digger.

Such an addition as this to my Peerless Collection of business verse is extremely welcome at this time. It has been a cold spring and the crop of spring poetry has been a poor one, so that additions to the Peerless Collection have been fewer than usual. Hence my joy when I discovered this gem.

* * *

A sassy little chap came up to me the other day—I count a few of them among my friends—and said, "June know that this is the second month of spring?"

And the next moment he spring-sprang-sprung through the ambient spring atmosphere at such a rate that I have been nursing a sore toe ever since.

* * *

Most of us have seen the recent announcements that a new stone has been invented, made from milk. The idea on the face of it seems preposterous, but we are assured that "milk stone" or galalith, as it is called, is now an accomplished fact and that a considerable industry is being built up in this strange new material. It can be made more cheaply than celluloid and has the great advantage over celluloid of being noninflammable. The makers say it is "as soft as silk and as white as milk."

The raw material is skimmed milk from the large cooperative dairies. To this in large tanks is added rennet, for the purpose of coagulating the casein, which is pressed, dried, and powdered, and freed from its cheesy odor by repeated washings and finally is hardened by a chemical. The product is declared to be more brilliant, more solid, and a trifle heavier than celluloid.

Galalith is found to be as easy to work as wood, and it can be made into a great variety of articles, such as combs, hairpins, piano keys, buttons, knife handles, umbrella handles, backs for brushes, paper knives, dominoes, inlaid ornaments for furniture, and almost any object requiring solidity and fine polish. It can be given any color or made to imitate marble, coral, tortoise shell, and other ornamental materials. It bids fair to attain considerable importance in the arts.

* * *

From the Dayton, Ohio, Herald of May 31, I learn that "J. W. Binkley, a hardware merchant on West Third street, near Crescent, was robbed of a pocketbook containing $133 and two checks, one for $14.25 and the other for $4, while on a street car Thursday evening. He boarded the car at the Soldiers' Home and during the trip to the city he thought he felt someone's hand in his pockets, but gave no attention to the matter. He discovered his loss when he reached home and notified the police, but could give no clue."

The reporter who pounded out that item on his veracious typewriter was hardly complimentary to Mr. Binkley. Just think of "giving no attention to the matter" when you think you feel someone's hand in your pocket!

* * *

A hardware dealer at Phillipsburg in Western Kansas rejoices in the name of Bridegroom and life must be for him one long and joyous honeymoon. Happy, happy man! Who would not, if he could, be a Bridegroom all his life?

## FOR ONE CENT POSTAGE.

The Philadelphia Telegraph of May 18 contained the following:

One-cent postage is the slogan of the National Hardware Manufacturers' Association, the executive committee of which met to-day at the Bellevue-Stratford. Other matters of much interest to the hardware trade were discussed, but the committee centered its attention upon the one subject, which it regards as of vital importance to all business interests.

The committee's action was naturally limited to a resolution, but this resolution will be sent to every trade and commercial organization in the United States, and an effort will be made to secure their cooperation. Pressure will be brought to bear upon Congress to pass such a law at the next session.

It is argued by the promoters of the movement that the postoffice can be run at a profit at the lower rate of one cent per half ounce for first class, or letter rate, and the hardware manufacturers, who are pioneers in the movement, believe that a concerted effort on the part of American business interests will bring about the desired decrease.

A merchant in an Oregon city gives a program in front of the store the evening of July 3, closing with a big fireworks display. The event has become a recognized event and one looked forward to by young and old. Incidentally the merchant cleans out all his fireworks. The program last year was: (1) Boys' foot race—boys under ten. (2) Boys' foot-race—boys over twelve. (3) Banner race. (4) Three-legged race. (5) Sack race. (6) Boxing contest. (7) Our funny orator. (8) Comic songs. (9) Pie-eating contest. (10) Milking race. (11) Bobbing race. (12) Free scramble.

# News Siftings

The Frazer Stove Co. of Indianapolis, has increased its capital stock from $25,000 to $50,000. L. M. Frazer is president and John Keefe secretary.

The plant of the National Stove Company at Lorain, Ohio, recently damaged by fire, will be rebuilt immediately and the new buildings will be rushed to completion as soon as possible.

The Oil City Asbestos Company has been chartered to manufacture asbestos at Oil City, Pennsylvania, with a capital stock of $100,000. The incorporators are R. M. and H. M. Nichols, H. M. Kaylor and A. L. Confer.

The Independent Tack Company of Cuyahoga Falls, Ohio, was incorporated at Columbus May 23, with a capitalization of $50,000. The incorporators are F. A. Gross, C. Daniel Keeney, Fred R. Post, H. Hoebe, F. Post and Rose Gross.

J. W. McQueen, vice-president of the Sloss-Sheffield Company, Birmingham, Ala., says: "Our order books for pig iron are so full that were we to close them now we could keep all our furnaces running for the remainder of the year on business already booked."

The Sheridan Stove Company of Quincy, Illinois, are building a steel range plant and a new cleaning room which it is said will be one of the largest in Quincy. They will also extend their molding room to the sidewalk. The cost of the improvements now under way will be in the neighborhood of $18,000.

At a special meeting of the directors of the Joseph Dixon Crucible Company, of Jersey City, N. J., held May 31, to take action on the death of Vice-President and Treasurer John A. Walker, Geo. T. Smith was elected vice-president, Geo. E. Long treasurer, and Harry Dailey was elected director and secretary.

A public auction of the Cahoone patents for soft coal stoves and ranges will be held July 15 at the office of Mr. Alfred F. Stevens, receiver of the Federal Stove Company, 738 Broad street, Newark, New Jersey. The officers of the company have assigned these patents to the receiver. Bids may be made by mail.

The Allen Manufacturing Company of Nashville, Tennessee, manufacturers of stoves and ranges, has awarded the contract for a two-story brick addition to its plant, increasing the daily output to 50 steel ranges. The structure will be 60x80 feet, with stone foundation; the lower floor will be used for a manufacturing department and the upper floor for storage room.

A large new warehouse for the Mountain City Stove & Manufacturing Company of Chattanooga, Tennessee, will shortly be completed and the plant will be able to turn out an increased number of stoves. The building will be of brick construction, 50x150. The erection of the warehouse will also give the plant more room in its present large building at the corner of Boyce and Twenty-fifth streets. The addition will cost about $8,000.

Mr. Hiorth, of Christiania, Norway, has invented a system of treating low-grade iron ores in an electric smelter, with graphite as a reducing medium instead of coal. He has been awarded a prize for his invention by the Iron and Steel Institute. There are large quantities of graphite and of low-grade ores in Norway, and the existence of water power makes the invention a valuable one if it can be worked well on a large scale.

The Detroit News announces that Mr. Fred E. Lee, president and general manager of the Estate of P. D. Beckwith, Inc., who has had his family residence in Chicago for the past two years, is soon to change it back to Dowagiac, Michigan, and adds: "This is understood by his acquaintances to be further evidence that he contemplates trying next year for the Republican nomination for governor of Michigan." At present Mr. Lee is in Europe.

The lands, buildings and personal property remaining at the old plant of the Bloomington Stove Company, Bloomington, Illinois, were sold at auction recently, and the First National Bank purchased the property. The sale was made on a judgment confessed in favor of the bank a short time ago for $21,006.70. The bank gave $7,250 for the real estate and $375 for the personal. The Bloomington Stove Company went out of business two years ago and the sale closes up the whole affair with a deficit, it is said, of something like $14,000.

## IRON AND STEEL CONDITIONS.

In spite of talk of railroad retrenchment in laying rails and buying rolling stock, 1907 is breaking all records in consumption of iron and steel, and the railroads are a leading factor. There is no doubt that congestion of railroad traffic has forced the roads to place extensive orders for rails and rolling stock, and now the rolling mills and machine shops are troubled with congestion in the attempt to fill orders.

United States Steel earnings for the first quarter and estimates for the second quarter, give ample evidence of the heavy iron and steel business of the season. Net earnings estimates for the half-year are $81,000,000, compared with $76,000,000 for the same period in 1906, $53,000,000 in 1905, and $33,000,000 in 1904. Indeed, the first half of 1907 breaks all records of the company.

It is now predicted that the year 1907 will give United States Steel net earnings of $170,000,000, with a surplus balance available for dividends on the common stock. With the same deductions as last year for depreciation, replacements, sinking fund and kindred expenditures, the net earnings of $170,000,000 would allow for a good dividend on the common.

This industrial prosperity in the leading manufactured staple is a good omen of a generally successful year.—The Commercial West.

## THE SUMMIT STOVE COMPANY.

The La Crosse, Wisconsin, branch of the Summit Foundry Company of Geneva, New York, was recently bought by the Summit Stove Company of La Crosse, and as already announced in these columns will hereafter be a strictly Northwestern concern. Mr.

William Reed, the president and manager of the new company, has been in charge of the plant at Geneva, New York, and comes West to take charge of the La Crosse foundry. The other officers of the Summit Stove Company are: L. C. Colman, vice-president; T. W. Folger, treasurer, and E. W. Colman, secretary.

The plant of the company at La Crosse includes a main building 216x60 feet, two stories high. The grinding, polishing and plating departments are 150x 36 feet. The molding room is 128x72 feet, and 32 molders are kept constantly employed. There are three warehouses, 200x36, 150x30 and 100x30 feet, respectively.

The Summit Stove Company have addressed a letter to the trade in which they say: "With Western capital, new management, new blood and new goods, we will endeavor to keep pace with the West. We do not expect to sell all the stoves and furnaces that are sold in the West and Northwest, but we do expect to get our share. We ask you to give us our portion of your business and we guarantee to save you money on prices for strictly first-class goods."

## CANADA'S NEW STRIKE LAW.

A brief synopsis of the new act to aid in the prevention and settlement of strikes and lockouts in mines and industries connected with public utilities, recently passed by the Parliament of the Dominion of Canada and assented to on March 22, 1907, is as follows:

The measure provides for government investigation of labor disputes in the industries connected with public utilities and imposes fines upon those responsible for causing strikes or lockouts prior to the holding of such government investigation. The fine for employes is from $10 to $50 and for employers from $100 to $1,000 for each day of the illegal strike or lockout, respectively.

There is also imposed a penalty of not less than $50 nor more than $1,000 upon "any person who incites, encourages, or aids in any manner any employer to declare or continue a lockout or any employe to go or continue on strike contrary to the provisions of this act." Applications from British Columbia and from other parts of the Dominion have already been made to the department of labor for investigations under this act, and in several cases it is believed that strikes and lockouts have already been averted because of its provisions.

## NEW INSULATING MATERIAL.

Samples of the new insulating material "corticite," invented by a Portuguese cork merchant, have been sent to the Bureau of Manufactures, Washington, D. C., and are at the disposal of manufacturers and others interested. U. S. Vice-Consul R. H. Kinchant writes of the new material as follows:

This new insulating material has for its principal component granulated cork, and is called "corticite." Its application is unlimited, for it will resist the cold of a Siberian winter and the rays of a tropical sun; also the attacks of insects, even the white ant being powerless against it. As a non-conductor of sound it should be useful in city flats. On boiler tubes and boilers it is said to reduce the temperature of the boiler room to an agreeable one. It is not inflammable, and may be generally adopted for partitions and linings of houses. Bricks and slabs of "corticite" are made for this purpose, and can be sawed and bored like wood. It would seem to possess special advantages for use on war ships, taking the place of wood as far as possible.

## SHOULD THE TON BE STANDARDIZED?

**Further Contributions to THE AMERICAN ARTISAN'S Symposium on the Subject.**

### Supports a World Standard.

To THE AMERICAN ARTISAN:

We would certainly suggest a uniform standardization of the ton in the United States. We are handling material which comes from foreign ports and invariably we purchase on a basis of 2,240 lbs. and in some cases have sold on this basis, but as a rule are selling on basis of 2,000 lbs. per ton.

It would be very nice indeed if a standard ton of the world were adopted, whether it might be 2,000 lbs. or 2,240 lbs.

Very truly yours,
TRINIDAD ASPHALT MFG. CO.
F. W. Terpening, Sec. and Treas.

St. Louis, Mo., May 20, 1907.

### Standardization Is Feasible.

To THE AMERICAN ARTISAN:

We have no suggestion to make as to a uniform standardization of a uniform ton, but do not doubt the feasibility of same.

Yours very truly,
ATLANTA TIN PLATE & SHEET MILL,
Edw. Fox, Acting General Manager.

Atlanta, Ind., May 20, 1907.

### Believes in a Uniform Ton.

To THE AMERICAN ARTISAN:

Relative to the question of difference between the ton of 2,000 lbs. and the ton of 2,240 lbs., we will say that we have experienced no material difficulty in the matter of purchase and sale of metals on account of these varying weights. It is our opinion, however, that the uniform standardization of the ton would be the more practical.

Yours very truly,
THE NATIONAL ROOFING TILE CO.,
C. H. Cory, General Manager.

Lima, Ohio, May 20, 1907.

### Deprecates Any Change.

To THE AMERICAN ARTISAN:

We do not see what improvement it would make to change the existing standards here, as everything here is thoroughly understood. To make any change would only probably lead to confusion.

Yours truly,
THE PARKERSBURG IRON AND STEEL CO.,
A. H. Geilfuss, Sec'y.

Parkersburg, W. Va., May 20, 1907.

### Recognize only 2,000 Lbs. as Standard.

To THE AMERICAN ARTISAN:

In our dealings in tonnage we recognize only 2,000 lbs. as standard for a ton of material. Very little dealing in the metal line is done on any other basis, and in our judgment 2,000 lbs. should be taken for a standard ton of material in all sorts of metal.

Yours truly,
MILWAUKEE CORRUGATING CO.,
L. Kuehn, Prest. and Treas.

Milwaukee, Wis., May 27, 1907.

You can't expect to win a large success in business unless you invite success through advertising.—Printers' Ink.

**THE AMERICAN ARTISAN AND HARDWARE RECORD is the only publication containing western hardware and metal prices corrected weekly. You will find these on pages 38 to 43 inclusive.**

G. C. Whisler has opened a new hardware store at Cameron, Mo.

C. S. Thomas has opened up a new stock of hardware in Breckenridge, Missouri.

The O'Neil Hardware Company is a new firm at 1050 Mt. Vernon avenue, Columbus, Ohio.

Bonnell & Chandler, of Danville, Iowa, have succeeded to the hardware business of Shepherd & Bonnell.

The Alva Clapp Hardware Company, of Atchison, Kansas, has been incorporated with a capital stock of $10,000.

Buck & Greene, of St. Albans, Vermont, have formed a partnership to carry on a retail business in hardware.

Welton Stanford has succeeded Teller & Stanford, hardware, Schenectady, N. Y., Mr. E. C. Teller having retired.

Retail hardware dealers of Columbus, Ohio, met recently at the Southern Hotel in that city to organize a hardware club.

The Farmers' Hardware & Implement Company has been incorporated with a capital stock of $10,000, in Hydro, Oklahoma.

Logan & Whaley, of Marshall, Texas, have incorporated their hardware and implement business, with a capital stock of $50,000.

The National Hardware Company of London, England, has established a buying office in New York City at 32 Mercantile Exchange Building.

The Wittliff Hardware Co., capital $33,000, has been chartered at Taylor, Texas; incorporators, T. H. Wittliff, Adolph Wittliff and Julius Wittliff.

F. J. Borum, formerly with the Simmons Hardware Company, of St. Louis, has opened a hardware store at 675 Seventh street, Parkersburg, W. Va.

The Champion Supply & Hardware Company, L. P. Schaefer and John Holl, proprietors, have engaged in the hardware business at Springfield, Ohio.

Morris & Brothers have bought the hardware and implement business of O. L. Porter & Co., in Saxman, Kansas, and will erect a brick building, 40x80 feet.

After being in existence for 35 years the hardware business of Jacob Fisch & Sons, Muscatine, Iowa, has been discontinued. The stock was sold out at retail.

King & Smith Company has succeeded to the hardware business of King, Mills & Co., in Tilamook, Oregon, I. C. Smith having purchased the interest of W. Mills.

The S. & S. Fireproof Paint Co. has been incorporated at San Antonio, Texas, with $200,000 capital stock by H. J. Lowry, C. V. Traweek, S. Grant and others.

Messrs. Hartsorn and Farrell, residents of East Des Moines, Iowa, have leased the building at 308 East Walnut street as a fishhook factory for wholesale and retail distribution. They have secured a patent on a new device and will exploit it with Des Moines as the headquarters.

It is reported from Findlay, Ohio, that a guarantee fund of $100,000 is to be raised in that city for the purpose of securing the location of manufacturing industries there.

The Reynolds Mfg. Co. has rented a large residence building in South Muscatine, Iowa, and will transform it into a factory for the manufacture of patent rat traps.

Hoopes Bros. Mfg. Co. of Adel, Iowa, will remove to Des Moines and occupy quarters at 404 West Grand avenue in that city. The company manufacture hardware specialties.

The Standard Wire Mfg. Company, of Fort Worth, Tex., recently incorporated with a capital stock of $25,000, will erect a plant for the manufacture of wire fencing and wire cloth.

The Hunter-Collins Hardware Co. has been chartered at Nicholasville, Kentucky, with $10,000 capital. The incorporators are G. L. Collins and R. M. and James Hunter of Nicholasville.

The Pickett Hardware Company, of 414-416 Pennsylvania avenue, Warren, Pa., has enlarged its facilities by taking in the store at No. 412, which will be devoted to warehouse purposes.

The Nevada Hardware & Supply Company, of Reno, Nev., has increased its capitalization from $50,000 to $500,000 and is completing a new building, three stories and basement, 50 x 140 feet.

The Modern Tool Manufacturing Company, capital stock, full paid, $3,000, has been organized at St. Louis, Missouri. Shareholders, John D. Wood, D. J. Flaherty and E. S. Anderson, 10 shares each.

The Porter-Grant Hardware Co. has been incorporated with a capital of $6,000 at Columbia, Alabama. The incorporators are E. R. Porter, E. J. Buntin, J. W. Grant, S. E. Gillerslett and A. G. Grant.

The Brainerd Mfg. Company, of Despatch, N. Y., manufacturers of special brass, bronze and steel hardware, are building a new factory. A brass foundry will be added to the main plant of the company.

The Carroll County Hardware Co. has been chartered at Berryville, Arkansas, with a capital of $25,000. The officers are J. R. Neff, president; W. B. Perkins, vice-president, and E. B. Hinchman, secretary and treasurer.

The Atkinson-Williams Hardware Company, of Fort Smith, Ark., wholesale hardware dealers, have just completed a new store building, 100x130 feet, four stories and basement, at the corner of Fourth street and Rogers avenue.

The Wilton-Nicholas Hardware Co. has been chartered at Harrisburg, Virginia, by C. L. Wilton, president; F. F. Nicholas, vice-president; E. C. Wilton, secretary and treasurer; Joshua Wilton, all of Harrisburg; capital, maximum, $50,000.

The Hardware & Machine Reduction Company, New York City, has been incorporated to manufacture tools, machinery, hardware, etc.; capital, $10,000. Incorporators: Frank La Gratta, No. 170 East 102d street; Michael Benincasa, No. 462 East 115th street;

Luigi Mazzala, No. 311 East 112th street, all of New York.

The Cedar Falls Scale & Mfg. Company, Cedar Falls, Iowa, has been incorporated, capital stock $20,000, to manufacture scales of all kinds. George E. Miller is president and secretary, and T. E. Brittan vice-president and general manager.

The Atlantic Turpentine Co. has been incorporated at Lyons, Georgia, with $65,000 capital stock by B. H. Baker and R. M. Hitch. It will be a subsidiary corporation of the Southern States Pine Product Co. and will rebuild a plant at Lyons recently burned.

The large machinery supply and hardware house of Fogarty & Dickinson, at San Luis Potosi, one of the largest dealers in Northern Mexico, was completely destroyed by fire May 19, causing a loss of about $500,000, much of which was covered by insurance.

Otto D. Peterson, bookkeeper for the Fred Kroner Hardware Company, of La Crosse, Wisconsin, has left for Panama. He is the inventor of the Peterson excavator, a new machine which may be used either for digging a trench or filling. It is expected that the machine will be given a trial on the canal work.

The Henkle & Joyce Hardware Company of Lincoln, Nebraska, is now exclusively in the wholesale business. Until last winter the firm handled retail hardware, but the growth of the jobbing business caused them to dispose of the retail department to the Hardy company. The Henkle & Joyce Hardware Company are now located near Eighth and Q streets.

The old-established business of I. E. Palmer, Middletown, Conn., has been incorporated under Connecticut laws as the I. E. Palmer Company, with capital stock of $500,000. I. E. Palmer, who has conducted the business for 48 years, is president and treasurer, Townsend Palmer, vice-president, and F. E. Fowler, secretary. The concern manufactures hammocks, mosquito nettings, canopies and window screen cloth.

The J. Stevens Arms & Tool Company, Chicopee Falls, Mass., under date of May 29, announced that hereafter the list price of the Stevens "Tip-Up" Pistol No. 41 will be $3.00 instead of $2.50, an advance of 50 cents in list. Discounts remain the same. This advance, the company says, was absolutely necessary and had been held off for nearly a year, hoping some change could be made to reduce the cost of manufacturing, but as this pistol is almost entirely hand made the cost of labor steadily advanced until it passed the selling price.

## BUCKEYE LIQUID PAINTS.

The products of the Buckeye Paint & Varnish Company, Toledo, Ohio, are designed to meet the wants of all classes of paint consumers. All their paints and varnishes are fully guaranteed as being made of the best material obtainable.

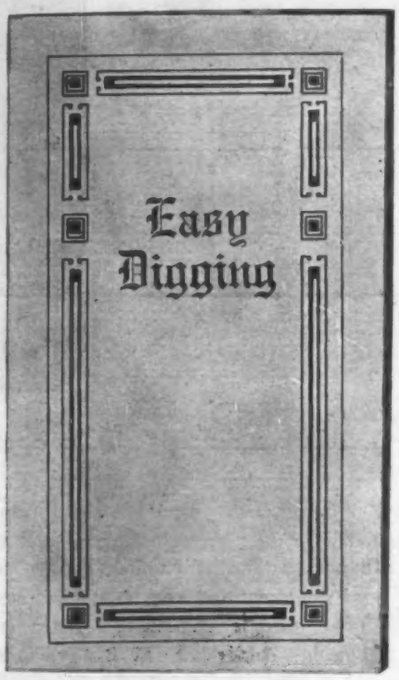
The Buckeye Standard Liquid Paints are made from white lead, zinc and reliable pigments, ground in pure linseed oil by improved machinery. The process, it is claimed, fully insures uniformity in color, fineness and covering capacity, while the liability to fade of these machine-made paints is said to be far less than that of paints mixed by hand in the old-fashioned way.

The Buckeye paints are put up for shipping in ¼ gallon cans, six gallons in a case; in half-gallon cans, also six gallons in a case, and in one-gallon pails with the same quantity in a case; also in three and five-gallon buckets and in half barrels and barrels. Sample colors and prices will be sent on application. When writing kindly mention THE AMERICAN ARTISAN.

## "EASY DIGGING."

According to the writer of "Easy Digging," an attractive booklet just issued by Iwan Brothers of Streator, Illinois, "shooting post holes in the ground with a shotgun is not quicker than the way they do it now with the Iwan Post Hole Digger."

This booklet, which is decidedly novel in make-up,



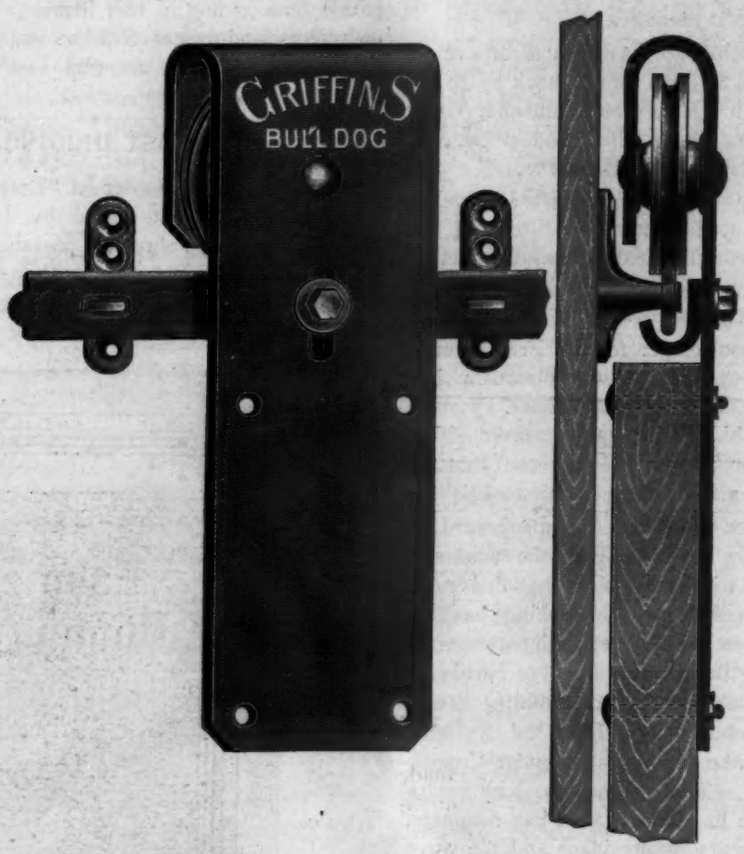

appearance and contents, has been prepared to inform the trade of the merits of Iwan's Patent Improved Post Hole and Well Auger, which is claimed to be the best in the world for all kinds of earth boring. Iwan Brothers are advertising this useful implement directly to the consumer by means of many rural papers and in all their advertising they direct the consumer to his nearest dealer, giving the hardware man the opportunity to supply him at a profit which, they say, is the best profit in the post hole auger line.

The information contained in the booklet is of just the right kind to enable the dealer to make a good selling talk on the Iwan Post Hole and Well Auger, which is a leader among the hardware specialties manufactured by Iwan Brothers. It is sold by the majority of hardware jobbers, the manufacturers state, and can therefore be quickly secured on rush orders.

An electrotype for local advertising is furnished to the trade by Iwan Brothers, who will send prices, etc., on request, also copies of "Easy Digging." When writing Iwan Brothers, kindly mention THE AMERICAN ARTISAN.

## GRIFFIN'S "BULLDOG" HANGER.

The Griffin Mfg. Company have recently brought out the Bulldog Hanger to meet the demand for an extra heavy, substantial hanger for barn, warehouse and fire doors. The heavy one-piece construction of this hanger is designed to overcome all vibration. The frames are made of heavy boiler plate steel and it is claimed will not rust out. The wheels are four-inch diameter semi-steel castings and have hard steel roller bearings. The guard is adjustable for any track one inch to 1½ inches wide, but the hanger is designed especially to be used with the Griffin Mfg. Company's Erie-King Track.




The Bulldog Hangers weigh 10 pounds per pair. When writing for prices, etc., address Erie, Pa., and kindly mention THE AMERICAN ARTISAN.

## BEMIS & CALL TOOLS.

The combination pipe and nut wrench illustrated herewith is one of the excellent line of wrenches manufactured by the Bemis & Call Hardware & Tool Company, of Springfield, Massachusetts.

**Combination Pipe and Nut Wrench No. 45.**

The head, bar and shank are a one-piece steel forging and the tool is a strong and serviceable combination of a nut and pipe wrench which is claimed to be equally efficient in either capacity. It will be found especially useful on general work, the makers say, as it obviates employing two wrenches.

It is made in sizes from 8 to 18-inch, and the parts are interchangeable. Extra parts can always be had from the makers and their catalogue, with prices, etc., will be sent on request. When writing the Bemis & Call Hardware & Tool Company, kindly mention THE AMERICAN ARTISAN.

## "OUR DRUMMER" FOR JUNE.

In a heart-to-heart talk to retailers "Our Drummer" for June, 1907, being catalogue No. 615 of Butler Brothers, Chicago and New York, says that the aim of the modern jobber is to be a partner to the retailer. To-day the jobber's province is, in the opinion of Butler Brothers, to be the custodian of the retailer's reserve stocks, and as such all the trouble and all the risk of having what the retailer needs when he needs it should fall upon the jobber.

Butler Brothers claim as modern jobbers to do

everything possible for a partner to do in booming the retailer's trade. They carry complete stocks, right up to the moment when the goods are needed, and distribute them not at one but at four central shipping points. Their monthly catalogue brings to the retail store seasonable leaders for the month and also gives plans for so using them and regular goods as to increase the net profit.

June is regarded by Butler Brothers as a good month in which to be busy. They advise the retailer to cultivate the 4th-of-July trade and also to take advantage of the rising interest in all kinds of summer sports.

Butler Brothers' expert service bureau gives in "Our Drummer" suggestions for helping the sale of 4th of July goods, with plans and devices suitable for use by the dealer and many helpful hints of general character. The service of this bureau is always at the disposal of Butler dealers. "Our Drummer" will be forwarded to any dealer on request. When writing Butler Brothers for it, kindly mention THE AMERICAN ARTISAN.

## DISSTON "CHROMOL" HACKSAW BLADES.

After careful study and experiments, Henry Disston & Sons of Philadelphia, Pennsylvania, have prepared to meet the growing demand for hacksaw blades of quality by placing on the market their new "Chromol" hacksaw blade, which is guaranteed superior in every respect.

The prime requisites of a hacksaw blade are strength, maintenance of cutting edge, and true cutting.

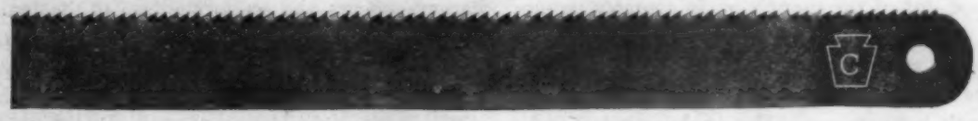
The material in the Chromol hacksaw blade is made in the Disston works and possesses the peculiar qualities of high speed steel, making it specially adapted, it is claimed, for saw blades to be used for cutting metal.

The teeth are milled in, which gives a square cutting-edge to the points, as well as the proper pitch or angle for cutting metal. In the Chromol blade the entire square cutting-edge of the tooth comes in contact with the work. The advantages in the Chromol blade are brought about by the manner in which it is toothed, as stated above, and by the improved method of setting the teeth, both of which, it is said, insure rapid and true cutting.

It is a practice of Henry Disston & Sons to keep informed on the working merits of goods by making practical tests. In a recent test of various hacksaw blades in connection with the Chromol, making cuts in a bar of steel of certain size and quality, the blades, all being of uniform length, thickness, number of points, etc., were separately placed in a machine built for the purpose, run by power so as to obtain the best possible unprejudiced results, and it is claimed that the Cromol hacksaw blade so far excelled every other make used in the test that Henry Disston & Sons have no hesitation in guaranteeing the Chromol hacksaw blade will do more work than any other hacksaw of similar dimensions on the same size and class of material.

As an instance of how well the Chromol blade works, in February the makers report that they received from one of the largest traction companies in the United States a first order for the blades, since which time they have had repeat orders from them making a total of 550 gross of Chromol hacksaw blades, and this certainly speaks volumes for the merits of the blades.

When writing Henry Disston & Sons for further information, prices, etc., kindly mention THE AMERICAN ARTISAN.




Disston "Chromol" Hacksaw Blade.

## THE NEW STEVENS CATALOGUE.

The largest and most comprehensive catalogue ever prepared by the J. Stevens Arms & Tool Company has just been issued as the company's Firearm Catalogue No. 52. It supersedes all previous editions.

This 160-page book of reference embodies detailed descriptions and illustrations of the entire Stevens line,

Front Cover Design, Stevens Firearm Catalogue No. 52.

including their new Little Scout Rifle No. 14 and No. 80 Repeating Gallery Rifle, also their No. 325 Double Barrel Hammerless Shotgun and Stevens Odorless Gun Oil.

In addition to the technical descriptive matter concerning the various models of Stevens make, there are interesting chapters devoted to the choice of a rifle, the character of rifles, and testing a rifle, methods of cleaning shotguns, ammunition, etc. The front cover is of an especially attractive character, the illustration herewith hardly doing justice to its artistic effect. The cover represents, in colors, types of many nations using the Stevens arms and a number of Stevens models are accurately reproduced in connection with the original and spirited design. This cover is justly considered both unique and striking.

An excellent index makes the use of the catalogue

easy and interesting, and the company say that this book of reference is indispensable to every progressive dealer in firearms. A copy of the catalogue will be forwarded to any dealer or sporting-goods merchant free upon demand. Address J. Stevens Arms & Tool Company, Chicopee Falls, Massachusetts, and when writing kindly mention THE AMERICAN ARTISAN.

## A HARDWARE WINDOW DISPLAY.

One of the window displays that was honorably mentioned by the judges in THE AMERICAN ARTISAN show window competition for 1907 is shown on this page. It was submitted under the name, "Harry Leon," by G. E. Francisco & Son, hardware dealers at Lake City, Iowa, who sent with the photograph the following description:

"This window display has an oval platform for display stand with an electric street car and trailer traveling around the oval with small dolls for passengers.

"The tunnels are made up of cotton, and the cars going in and out of the tunnels made a pretty picture with the reflections on the glass. The window is trimmed with crepe paper, with red and blue paper bells. The arch is made of stove pipe and elbows covered with holly paper. The background is holly paper.

"Uncle Obadiah is at the left holding a Prisco lantern. Santa Claus moved his head from side to side and was run by clockwork.

"The picture does not show Santa's expression and color. The ducks, swan and cattails are painted on the glass, as is the fence sign in front of Uncle Obadiah. The trees in the background are a reflection on the glass from the city park in front of the store. The window is ten by twelve feet.

"The rest of the window in the picture explains itself. This window was decorated for holiday use and attracted a great deal of attention."

**What an Expert says of It.**

Commenting on this display for THE AMERICAN ARTISAN, an expert window trimmer said:

"I am very confident that the effort of Mr. Francisco paid his firm magnificently for the great pains and skill shown in dressing this window. This was designed for a holiday window and shows very largely those items that could be considered as holiday gifts. If Mr. Francisco would have used on his various items of cutlery an assortment of price markers, it would have placed his window almost above criticism.

"I note that in opening up the blades of several knives, he opened only one blade in a knife. It is understood that every knife has one blade. The knives should show an assortment of blades and special individuality of parts that command particular attention.

"Mr. Francisco will find in making another cutlery display that it is well to class the various branches of his goods by themselves. For instance, table cutlery, carvers, shears and scissors appeal to the feminine observer most, whereas jackknives, razors, razor strops, etc., appeal to the masculine side of the house. Furthermore, all cutlery should be laid as much as possible in a manner so as to show the flat side to the front. You will notice by looking at a carving knife, for instance, that it shows much better when you look at the face of the blade than when you are looking at the point thereof."

**Honorably Mentioned by the Judges in THE AMERICAN ARTISAN Window Display Competition, 1907—Submitted by G. E. Francisco & Son, Lake City, Iowa.**

An Iowa hardware dealer displays his lines of rope without taking up floor space in an ingenious way. The entire stock is kept in the basement, a hole being bored through the floor for each line, a few inches from the counter. The rope passes through this and is fastened to the counter.

## FOR THE BOSTON CONVENTION.

Chairman W. H. Bennett of the committee of the Chicago Retail Hardware Association that has had charge of the arrangements for the special hardware train that will carry Western delegates and visitors to the annual meeting of the National Retail Hardware Association at Boston, June 18-21, announces that the arrangements are now practically completed and are receiving a final polishing.

The Hardware Special train will leave Chicago at 1:45 p. m. on Saturday, June 15, from the LaSalle Street station, and will go over the Lake Shore & Michigan Southern, picking up delegates at Toledo at 7:50 p. m. and Cleveland at 10:30 p. m. the same day.

Sunday will be spent at Niagara Falls, where the entire delegation will be entertained on Sunday morning by representatives of the Oneida Community, Oneida, New York, who will take the party on a trip around the falls and the gorge. Lunch will be served to the party as guests of the Bureau of Publicity of the city of Niagara Falls, which hopes to secure the convention of the National Retail Hardware Association next year. The special train will leave the Falls at 5 p. m. for Boston.

The dining-car arrangements on the train will be such as to ensure perfect comfort to all who make the trip, and Mr. F. E. Sorenson, city passenger agent of the Lake Shore road, will accompany the party from Chicago all the way through in order to see that nothing is lacking as far as the railroad is concerned.

The Great Northern hotel will be headquarters for the Western delegates and visitors on Saturday morning, June 15, prior to the departure of the Hardware Special.

A committee of Chicago hardware men will be on hand to get everybody headed right for Boston.

Chairman Bennett furnishes the following list of those who have so far signified their intention of proceeding to Boston on the Hardware Special:

E. M. Bush and wife, Evansville, Ind.
S. R. Miles and daughter, Mason City, Ia.
M. L. Corey and wife, Argos, Ind.
A. T. Stebbins, Rochester, Minn.
H. L. McNamara and wife, Janesville, Wis.
T. J. Mathews, Mt. Vernon, Ill.
E. L. Somers, Chicago, Ill.
L. D. Nish and wife, Elgin, Ill.
H. G. Cormick and wife, Centralia, Ill.
C. H. Williams and wife, Streator, Ill.
E. H. Hauss, East St. Louis, Ill.
Grant Porter, Chicago, Ill.
Wm. Bittel, Peoria, Ill.
Herman Cole, Alton, Ill.
L. D. Ray, Rockford, Ill.
C. E. Hall and wife, Indianapolis, Ind.
J. F. Fulton and wife, daughter and son, Portland, Ind.
A. Deprez, wife and son, Shelbyville, Ind.
M. M. Hamilton, Brownstown, Ind.
W. A. Shipley and daughter, Lafayette, Ind.
P. C. DeVol and wife, Council Bluffs, Ia.
L. C. Abbott, Marshalltown, La.
J. H. Gormley and daughter, Chicago, Ill.
F. R. Currie, Mason City, Ia.
J. F. Doty, West Liberty, Ia.
H. S. Vincent and wife, Fort Dodge, Ia.
C. E. Haas, Le Mars, Ia.
A. R. Sale and wife, Mason City, Ia.
E. H. Heins and wife, Renville, Minn.
J. F. Barr and wife, Lincoln, Neb.
H. J. Hall and wife, Lincoln, Neb.
E. D. Hawkins, Vermillion, S. D.
H. E. Johnson, Renfield, S. D.
F. A. Bare and wife, Mansfield, O.
J. E. Baker and wife, Dayton, O.
J. E. Digby, McKees Rock, Pa.
G. L. Moore, McKees Rock, Pa.
Wm. Mendenhall, McKees Rock, Pa.
W. E. Taylor, McKees Rock, Pa.
J. E. Kornely and wife, Milwaukee, Wis.
C. A. Peck and wife, Berlin, Wis.
A. J. Scott and wife, Marine City, Mich.
R. Walstrom, Minneapolis, Minn.
Hamp Williams and wife, Hot Springs, Ark.
Adolph Unfug, Walsenberg, Colo.
J. R. Sauer, Frankfort, Ky.
W. H. Hahn, St. Louis, Mo.
Frederick Neudorff, St. Joseph, Mo.
C. S. Johnson, Barberton, O.
J. Murphy, Racine, Wis.
O. P. Schlaffer and wife, Appleton, Wis.
E. H. Ramm and wife, New London, Wis.
Frank Hacker, Friend, Neb.
Nathan Roberts and wife, Omaha, Neb.
A. L. Severance, Durant, I. T.
G. R. Lott and daughter, Chicago, Ill.
C. T. Gadd and wife, Des Moines, Ia.
M. H. Ogden, Carbondale, Ill.
F. C. Whinery and daughter, Union, Ia.
W. C. Stephens, Chicago, Ill.
E. E. Mitchell, Morrilton, Ark.
W. H. Bennett and daughter, Chicago, Ill.

## "KEEN KUTTER" TOOLS AND CUTLERY.

Through a campaign of advertising which is extended throughout the country in publications that reach all classes of the industrial community, the Keen Kutter tools and cutlery have acquired a national reputation, and one of such a character, it is claimed, that the Keen Kutter trademark has come to be recognized as an evidence of quality in the goods which

not only makes them extremely salable but also enables the merchant to get full price for them. This characteristic of Keen Kutter goods enables the retail merchant to make a satisfactory profit, while it is also claimed that the purchaser of these goods becomes that best of all advertising mediums, a satisfied customer.

A complete catalogue of Keen Kutter goods with prices, etc., and helpful literature for the use of the hardware dealer who handles the goods, can be obtained by addressing the Simmons Hardware Company, St. Louis, Missouri. When writing kindly mention THE AMERICAN ARTISAN.

## RETAIL HARDWARE DOINGS.

NEW FIRMS AND INCORPORATIONS.

East Liverpool, Ohio—The East Liverpool Hardware Company is a new firm here.

Springfield, Ohio—The Champion Supply & Hardware Company was incorporated with a capital stock of $10,000. The company is located at 78 East Main Street.

Assaria, Kansas—The Assaria Hardware Company has been incorporated with a capital stock of $16,000.

El Paso, Texas—The Laurie Hardware Company has increased its capital stock from $25,000 to $50,000.

Houston, Texas—Jones Hardware Company, incorporated, with capital stock of $20,000.

Snyder, Texas—McCullough Hardware Company, incorporated with capital stock of $25,000.

## Advertising Department

**Our readers are invited to send in copies of their advertisements in the local press for criticism. All communications should be addressed to the "Advertising Department" of THE AMERICAN ARTISAN.**

As an example of what a good hardware advertisement should be it is a pleasure to reproduce an ad. which the Orr & Lockett Hardware Company of Chicago have recently run in the Chicago papers. It is a single column ad. of no great size, but it will well repay study. This firm is located in the heart of the "loop" district of Chicago, in the neighborhood of the great department stores, most of which now have their hardware department, but the Orr & Lockett Hardware Company meet the department-store competition

ORR & LOCKETT HARDWARE Co.
71-73 RANDOLPH ST.
TELEPHONE CENTRAL 551 MAIL ORDERS FILLED

To-Day Is

**Hose Day**

To prove to you that we sell the best hose on the market, we offer for to-day and to-morrow only

**50 Feet** *Guaranteed*
**Hose, $4.95**
**and NOZZLE FREE**
*if you ask for it.*
*Delivered free within city limits.*

Every foot is guaranteed, and we will replace *without argument* any that shows defect. *2nd floor, north room.*

And while you are there look at our

**"IMPERIAL" LAWN MOWERS**

Ask the salesman to show you why they are best.

We handle Garden Tools and the most economical refrigerator on the market.

boldly and skilfully. They are firm believers in the efficacy of quoting prices, as will be noted from the ad. we reproduce.

The Orr & Lockett show windows are an object lesson to every hardware dealer. They are arranged with the greatest possible care and every article displayed bears a price tag, no matter how small it may be. Attractive signs are used over the windows to call attention to the display and these are also frequently changed. Their advertisement contains all the requisite features of effective advertising and is a model worthy of imitation.

* * *

Everybody has seen from time to time in the daily papers reproductions of curious advertisements of country stores, in which a jumble of various kinds of goods are mentioned in strange juxtaposition like "coffins and ice cream," "cheese, crackers and coal oil," etc. Many people suppose that such advertising is purely imaginary and that the curious advertise-

**Elastic Metallic Roof**
**PAINT.**

OLD LEAKY ROOFS CAN BE SAVED AND MADE WATER-PROOF.

This paint is proof against weather, fire or rust. Will not crack, run, blister or scale. Will not evaporate after once set. Is not affected by acids. Is a fine Waterproofing Material.

50 CENTS PER GALLON.

**FOR SALE ONLY BY COMBS BROS.**
FRESH BREAD RECEIVED DAILY.

ments are invented by newspaper writers to provoke a smile, but we reproduce herewith in reduced form an advertisement which appeared recently in the Ovid, New York, Gazette at the expense of Combs Brothers of that town. Notice the line, "Fresh Bread Received Daily," which makes a laughing-stock of an otherwise excellent advertisement of roof paint.

* * *

An advertisement for the fall season is seen in the card of J. C. Fuhr, Williamsburg, Ohio, which is reproduced in greatly reduced size.

The upper portion of the advertisement is well dis-

**WINTER**

Will soon be here and you will want the

**Best, Most Economical Heater!**

At a price to suit your purse.

We have the largest, most up-to date stock of

**Heaters and Ranges**

We ever displayed.

**It will Pay You to Come and Get My Prices.**

Loaded Shells 40c per Box.

Prices and Quality are Items.
I can give you both.
Respectfully yours,

**J. C. FUHR,**
The Hardwareman - - - Williamsburg, Ohio

P. S.—Do you need a FURNACE? Consult me.
A fresh car load best PORTLAND CEMENT just arrived. Get price.

The upper portion of the advertisement is well displayed and commendable, and it is probable that if Mr. Fuhr keeps on trying he will secure good results from his advertising space.

# Heating and Ventilating

## THE CRESCENT WARM AIR FURNACE.

The Crescent Warm Air Furnace is the latest production of the Thatcher Furnace Company of New York and Chicago, and some of its up-to-date features will be readily noted by a glance at the accompanying illustration. The Crescent is made to meet the growing demand for a double door furnace in which either coal or wood may be burned and is described as thoroughly high grade in quality and workmanship. The grate used in the new furnace is the improved triangular revolving grate, which is heavily made, easily operated and so constructed that one half can be shaken independently of the other. A cast-

The Crescent Warm Air Furnace.

iron plate is provided to be laid over the bars when wood is burned. The radiator directly over the fire pot is made—both inner and outer shells—of heavy cold rolled steel and has a large radiating surface presented to the direct travel of the gases and smoke, by means of which, it is claimed, a large volume of air can be efficiently heated with great economy in fuel. Water-coil openings, not shown in the cut, are arranged in the side of the feed pouch, so that a coil may be placed in the furnace at any time for supplying hot water for all domestic purposes.

For further particulars regarding the Crescent Warm Air Furnace address the Thatcher Furnace Company, 110-116 Beekman street, New York, or 204 E. Lake street, Chicago, and when writing kindly mention THE AMERICAN ARTISAN.

## FURNACE AND VENTILATOR CHAINS.

The "Triumph" and "Brown" chains made by the Bridgeport Chain Company, Bridgeport, Connecticut,

The "Triumph" Chain.

are brought to the attention of the trade by the manufacturers' claim that these chains for furnace, damper or ventilator purposes are the cheapest to use because

The "Brown" Chain.

they are the best. The illustration shows the exact size of the chains, which are made in either steel or brass.

The "Triumph" is claimed to be the strongest chain in the world and eleven times as strong as jack chain, thus giving that element of durability which results in satisfaction.

Hardware dealers and furnace men are invited to write the Bridgeport Chain Company for their prices on these chains. When writing, kindly mention THE AMERICAN ARTISAN.

## THE "PATRIC" FURNACE.

The Patric Furnace Company, of Springfield, Ohio, have just issued a "Blue Booklet" to describe the special features of their Patric furnace, known as the furnace with the coking and smoke-burning magazine, which is peculiar to this furnace and enables the dealer to recommend it for soft coal because, as the makers say, "the coking magazine burns soft coal scientifically, consumes the smoke and saves the fuel." Hard coal and coke can also be burned in this furnace. All the features of the construction are plainly illustrated in the "Blue Booklet," which will be sent on request.

When writing the Patric Furnace Company, kindly mention THE AMERICAN ARTISAN.

## STEEL CASING RINGS.

The Steel Casing Rings furnished by the Walworth Run Foundry Company of Cleveland, Ohio, are made to conform to individual requirements in every respect, and every manufacturer who uses casing rings can rely upon getting them from the Walworth Run Company perfect in circumference to the individual dimensions furnished. The rings are guaranteed never to break and to be perfect circles. They are made with lugs for double casings, without lugs for single casings, in full circles for ordinary use, and in partial circles for cast fronts. They are delivered ready for use and by means of them, it is claimed, profits can be increased.

The Walworth Run Foundry Company are also manufacturers of semi-steel registers and makers of gray iron castings. When writing for prices on steel casing rings, etc., address them at 27th street, S. W., Cleveland, and kindly mention THE AMERICAN ARTISAN.

## THE MUELLER ALL-CAST FURNACE.

The L. J. Mueller Furnace Company, of 191 Reed Street, Milwaukee, Wis., complete this year half a century in the business of manufacturing heaters, having been established in 1857. It is said that 40,000 Mueller heaters are now in use and the makers claim that the Mueller All-Cast Double Radiator Furnace stands in a class all its own, with no other heater to compare with it in power, durability and economy.

The advice given to dealers by the L. J. Mueller

Furnace Company is based on the principle that it does not pay to figure on the cheapest kind of furnace, because there is no profit in that class of work. They point out to the dealer that on the Mueller All-Cast Double Radiator Furnace a fair margin of profit can be made, and that it can be conscientiously urged upon buyers as a furnace without competition. It is claimed to possess more direct heating surface than any other heater made, while its capacity for consuming fuel is such that the makers say it is more economical in use than any other furnace. The object of its construction is to heat the largest possible amount of air and send the least possible amount of heat up the chimney.

Catalogue and prices of the Mueller heaters will be sent on request. Address L. J. Mueller Furnace Company as above and when writing kindly mention THE AMERICAN ARTISAN.

## GREEN'S COLONIAL FURNACE.

A furnace which the makers claim will appeal to the retail customer and which also leaves the dealer a big margin of profit is Green's Colonial, made by the Green Foundry & Furnace Works, of Des Moines, Iowa. It

is described as heavy, durable and economical and an easy seller. It is furnished with a hot air blast fire-pot, which allows the heated air to pass over and into the fire, converting the gas and smoke into heat and thus reducing coal bills. The double feed doors admit large chunks of coal and the furnace is claimed to be especially suited for long-distance heating.

Dealers and furnace men are invited to write for discounts and to order a sample furnace. Address the Green Foundry & Furnace Works, Dept. A, Des Moines, Iowa, and when writing, kindly mention THE AMERICAN ARTISAN.

## VOLUME OF AIR REQUIRED FOR DRYING.

In the drying of green lumber fresh from the water the air supply per pound of water evaporated frequently ranges between 2,000 and 5,000 cubic feet. A great deal depends upon the manner of exposure to the air, i. e., on the method of piling in the case of lumber. The enormous volume of air actually required for the mechanical process of taking up and carrying away the water is the best evidence of the necessity of positive and ample air movements.

Commercial success in drying, therefore, requires that the substance be exposed to the air in the most efficient manner; that the temperature of the air be as high as the substance will stand without injury and that the air change or movement be as rapid as is consistent with economical installation and operation. Under the mistaken idea that heat is the only essential to the drying process, dry rooms are only too frequently built with ample heating surface but with practically no opportunity for air circulation. Only because of natural leakage of air do they avoid dismal failure. Even where provision is made for circulation of air it is often the case that dependence is placed solely upon the effect of the heat to produce air movement. Such movement is sluggish at best and frequently uncertain. High stacks tend to improve the circulation, but in so far as the heat required to operate them might be otherwise usefully employed they are expensive as compared with mechanical means. Hence the use of the fan in connection with which all of the heating surface is massed in a remarkably small space. With the fan the volume is always under control as is also the temperature.—Engineering Review.

## PARAGRAPHS.

Mr. S. L. Wood, Secretary of the Stanton Heater Company, of Martin's Ferry, Ohio, was in Chicago on Friday, June 7, and a welcome visitor to THE AMERICAN ARTISAN office.

Des Moines, Iowa, is to lose the main plant of the Smoke Consumer Heating Company, which leaves for Watertown, Minnesota, where a factory will be erected at a cost of $8,000. The inducement offered was a factory site and a bonus of $2,000. A smaller plant will be maintained in Des Moines.

In addition to the elaborate system for supplying air in connection with the heating system in the new Carnegie Library Extension at Pittsburg, Pa., thirty exhaust fans are provided, which have an aggregate capacity of 650,000 cubic feet per minute. Disk fans are used in twenty-one equipments where the resistances are slight, but in nine cases long ducts and the necessity of discharging through long vent rises made the centrifugal type of fan necessary; all but one of the centrifugal exhaust fans are located in the basement and serve extended duct systems.

The Anaconda Copper Company recently issued its report for the year ended December 31. It showed the year's production of copper by the company to have been 94,963,835 pounds, a decrease of 479,895 pounds from 1905, nevertheless earnings are shown to have reached $20,955,000, a gain over 1905 of $3,526,000. Net profits before the payment of dividends are given as $8,842,669, or 29½ per cent on the $30,000,000 of stock, this figure having been reached after all depreciation and development expenditures had been charged off.

# Tinshop

## MITER PATTERNS FOR SKYLIGHT BARS.

### NO. 6.

BY LOUIS OEHRING.

[The figures referred to in this article, but which do not appear herewith, have been printed in THE AMERICAN ARTISAN in connection with earlier articles in this series on "Miter Patterns for Skylight Bars."]

BAR INTERSECTING TWO HIPS.—This bar is sometimes called the wedge bar. In Fig. 1 such a bar is shown as No. 5, and its intersection is also included in the arc at g. For this bar draw the plan as shown by A B C D E F G, also the sections X W of Fig. 8. Then draw the elevation in the same manner as for the two previous bars; also the section V. Then develop the pattern also in the same manner as for previous bars. It will now be seen that this pattern has both halves like the half of the pattern of the jack bar from numeral 7 to 11, Fig. 6, and like the previous bar no pattern is developed in practice. The pattern being produced by marking the part of the jack bar mentioned on the material and reversing; the same part of the pattern is again marked alongside of the first part marked, thereby making the complete pattern for this bar.

HIP BAR AT ANGLE OF RIDGE.—This bar is shown at 12, Fig. 1, and is the miter opposite the valley bar. The lower part of this bar is like the hip bar shown in Fig. 5. The upper part is different. As in Fig. 5, draw a sectional elevation, as shown in Fig. 9 (on the next page) by A B C, and the section (a) and (d), the inclination is the same as that for plain bar, Fig. 2. Now draw the plan by continuing the line B C to I, project A to J, and from J draw line to y at an angle of 45 degrees; then draw the bar as represented by D E F G, in a manner similar to that shown in Fig. 5; have the ridge intersect at right angles as shown by I F G H. Draw the line K L parallel to J y, project J to K and y to L, continuing the line y L indefinitely at right angles to K L. Make the distance L M equal to B C; connect K M. From M draw a line at right angles to L M and construct the section (b) of the ridge in the position shown, draw the lines Q S T R by projecting the points from (b), also those from the condensation gutter. From the miter line in plan project the points to Q R S T, noting the intersecting of the gutter of the hip with that of the ridge; through the points established draw the miter line Q M R; from this miter line draw lines parallel to K M and on it construct section (c), either by transferring from Fig. 5 or constructing it in the same manner as described in Fig. 5. The pattern development is the same as that for the upper part of Fig. 5, and will require no further description. This miter occurs also when a hipped skylight has a ventilated ridge, the one shown in Fig. 5 will not then be required.

## MASTER SHEET METAL WORKERS.

A delegation of seven from the Master Sheet Metal Workers' Assn. of San Antonio, Tex., went to Galveston May 18 for the purpose of organizing the master sheet metal workers there. They succeeded in forming a temporary organization, which has since been made permanent with the following officers: President, H. C. Opperman; vice-president, W. A. Hoffman; treasurer, Fred Hartel; secretary, W. G. Garbade; sergeant at arms, W. G. Fredericks. Every owner of a sheet metal shop in Galveston is a member of the new organization.

The San Antonio delegation stopped in Houston, Texas, on their return and organized the trade there with the assistance of the jobbers. They left a temporary organization, with the understanding that permanent officers would be elected at a subsequent meeting.

The officers of the San Antonio Association under whose management the good work was accomplished are as follows: President, T. P. Walsh; secretary, H. L. Lathrop; treasurer, A. W. Chatfield.

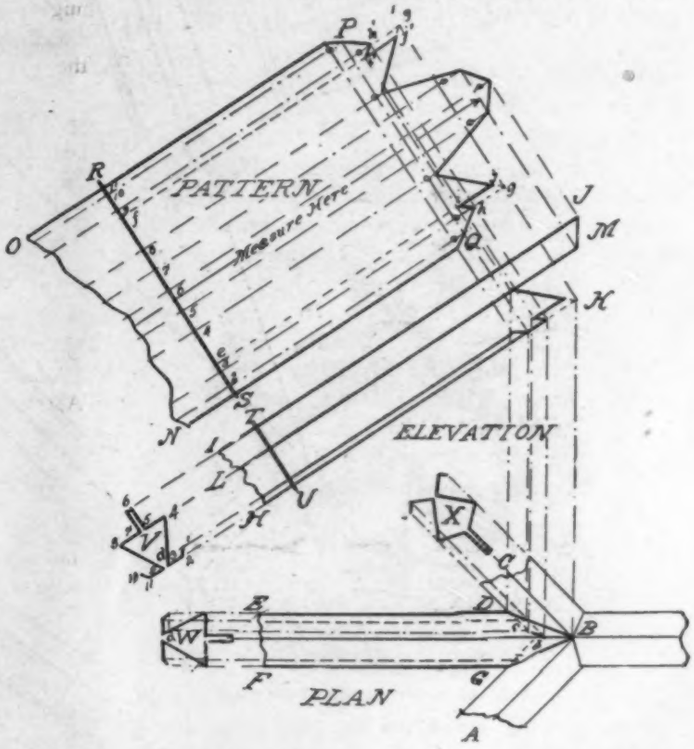



FIG. 8 - MITER FOR TOP OF BAR, BOTH SIDES INTO HIPS.

**Join the National Association.**

The Master Sheet Metal Workers' Association of Lafayette, Indiana, has affiliated with the National Association and it is understood that Providence, Rhode Island, and Wilkesbarre, Pennsylvania, will shortly follow Lafayette into the fold. It is understood that the masters of Cincinnati, Ohio, and Minneapolis, Minnesota, are also considering the advisability of joining the National.

"There is nothing so strong or safe in an emergency of life as the simple truth."—Charles Dickens.

## McVOY'S "OLD METHOD" TIN.

The McVoy Sheet & Tin Plate Company are calling the attention of architects to their roofing tin, known as McVoy's IC Old Method, by means of a folding post card of a character calculated to ensure its reading by those to whom it is addressed.

On the outside of the folder appears the question, "How many times did you call on your wife before you proposed to her?" This is applied to the architect by a note on the other side of the card, "Do you know how many times we have called upon you? We have called often because of our firm belief that quality, like honesty, must finally succeed. McVoy's 'Old Method' roofing tin possesses all the qualities that are essential for a permanent and durable roof covering." A return card is enclosed by which the McVoy Sheet & Tin Plate Company can be notified of the award of contracts for sheet metal work in which McVoy's "Old Method" can be used and the company add to the communication this remark: "If you prefer Charcoal Iron Base don't forget that 'McVoy's Uncle Sam' has been repeatedly accepted by the United States government."

Roofers will be gladly furnished quotations on McVoy's roofing tin on request. When writing, kindly mention THE AMERICAN ARTISAN.

## THE GLOBE VENTILATORS.

The Globe Ventilator Company, of Troy, New York, make their Globe ventilator in copper, galvanized iron and with glass tops for skylight purposes, and claim it to be absolutely storm-proof. With this ventilator, they say, schools, churches, halls, mills and factories, and audience rooms of every character can be perfectly ventilated. The Globe is claimed to be built on honor and sold on merit, and the manufacturers invite the trade to send for their pamphlet which describes the ventilator in detail and will interest all who have to do with ventilation. When writing the company, kindly mention THE AMERICAN ARTISAN.

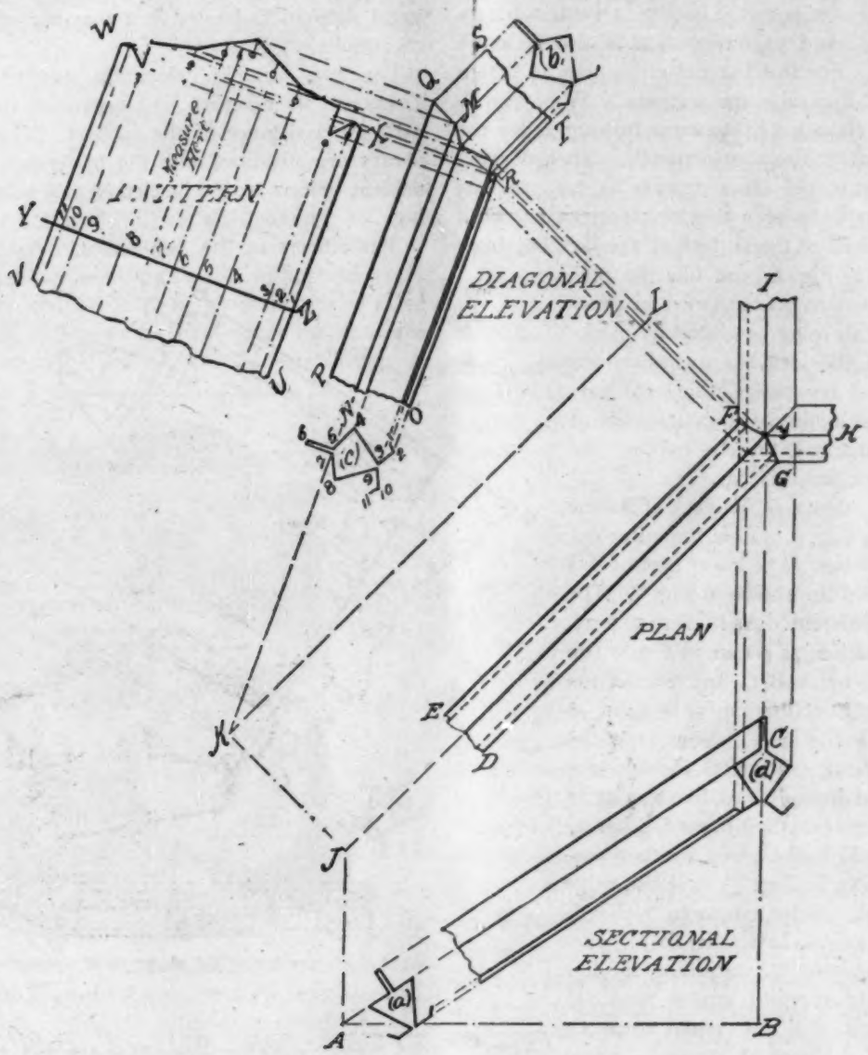


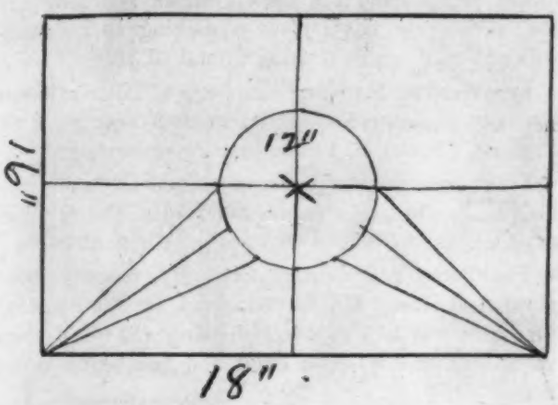

*FIG. 9.- MITER FOR TOP OF HIP BAR AT ANGLE OF RIDGE.*

The most successful advertiser is the man who is enthusiastic about his business. It is discouraging to attempt to do business with a man that you have to keep continually pumping enthusiasm into.—Mahin's Magazine.

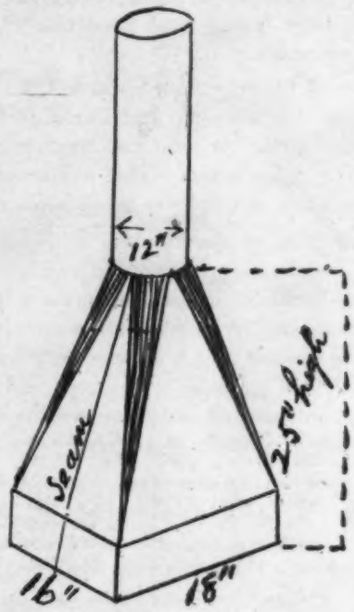
## WANTS A CHIMNEY TOP PATTERN.

To THE AMERICAN ARTISAN:

I would like to know how to strike a pattern for a chimney top in two pieces by triangulation, round at




the top, as per sketch. I can make a start but I don't understand where to get my points from to triangulate,




and the elevation. Perhaps some of the readers of the Tinshop will help me out. Yours very truly,

GEO. BROEKER.

Beardstown, Illinois, May 27, 1907.

## COVERING A DOME WITH SHEET COPPER.

To THE AMERICAN ARTISAN:

Please let me know the best method of covering a dome with sheet copper. Will it have to be seamed and soldered? If you please, let me know the best method of doing the same, as this is something that is new to me.

O. S. BUTLER.

Blytheville, Arkansas, June 3, 1907.

In the opinion of experienced roofers the question as to whether a copper roof for a dome should be seamed and soldered depends entirely upon the size of the dome. If it is of any considerable size, the copper should certainly be seamed and soldered in order to obtain the best results and make a thoroughly satisfactory job.

## WHAT CONSTITUTES A MECHANIC.

To THE AMERICAN ARTISAN:

In your issue of June 1, Brother H. E. Osborne has given his final explanation of my five-and-twelve steel square problem, the difference being so small that it would take a magnifying glass of very modern invention to discover the fault in the five-and-twelve on the steel square, to cut an octagon. Yes, Brother Osborne, I am always open for correction, and will accept your manly proposition for a "saw off," and remain friends.

My next, when ready, will be "What Constitutes a Mechanic?" as the word has a universal meaning, and is difficult to confine in these modern times.

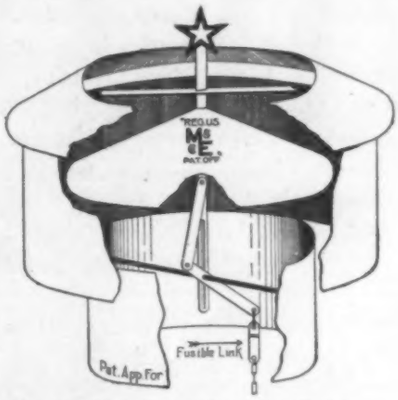
Yours truly,

Toledo, Iowa, June 3, 1907. A. A. JONES.

## THE FIRE-RETARDING "STAR" VENTILATOR.

Merchant & Evans Company of Philadelphia, Pennsylvania, are manufacturers of the Fire-Retarding "Star" Ventilator, which embodies some features of decided novelty in a ventilator.

The roof of this ventilator is movable vertically, and is held in its highest open position by a lever movement, controlled by a fusible link. In case of a fire




**The Fire-Retarding "Star" Ventilator.**

the link parts, and the top drops down by gravity, closing the opening.

The top is also a damper itself, as by regulating the chain length the opening is partially or wholly closable at any time, while still retaining its automatic closing feature in case of fire.

Thus the purchaser of this ventilator buys a notable combination; first, the Automatic Fire-Retarding "Star" Ventilator, and second, a controllable damper —all in one. The "Star" Ventilator is also claimed to be absolutely storm proof and to have a speed of air exhaust in excess of any other ventilator made, while in comparison with other makes it is claimed to be simpler and to have the fewest parts, also to be the lightest in total weight without sacrifice of proper gauge. The "Star" Ventilator can be supplied with glass top. For complete descriptive literature, prices, etc., address Merchant & Evans Company and when writing, kindly mention THE AMERICAN ARTISAN.

## NOTES AND QUERIES.

SCHOOL OF PLUMBING.

From Ford D. Bowers, Tekamah, Nebraska.

Can you give me the name of a good school of plumbing and heating?

Ans.—Coyne Brothers Company, 840 North Ashland avenue, Chicago, conduct a school of plumbing. The American School of Correspondence, 3321 Armour avenue, Chicago, include a course of plumbing.

LEADER REVERSIBLE HAY CARRIERS.

From Clark Brothers, Lakefield, Minnesota.

Can you tell us who are the manufacturers of Leader Reversible Hay Carriers?

Ans.—Milwaukee Hay Tool Company, Milwaukee, Wisconsin.

CEDAR WATER PAILS.

From Southwick & McElrath, Moville, Iowa.

Will you kindly inform us where we can buy cedar water pails with brass band hoops?

Ans.—From the Richmond Cedar Works, Richmond, Virginia.

AMERICA FISHING TACKLE AND FISHING REELS.

From E. C. Saecker, Lake Mills, Wisconsin.

Please give me the address of the manufacturer using the trade-mark America on fishing tackle and fishing reels.

Ans.—America Company, Momence, Illinois.

WOLFF'S PLUMBING CATALOGUE.

From P. Moran & Company, Dougherty, Iowa.

Where can I get Wolff's catalogue on plumbing?

Ans.—From L. Wolff Mfg. Company, 93 West Lake street, Chicago.

KEWANEE WATER SUPPLY CATALOGUE.

From P. Moran & Company, Dougherty, Iowa.

Where can I get the Kewanee water supply catalogue?

Ans.—From Kewanee Water Supply Company, Kewanee, Ill.

COMPOUND LEVER CUTTING NIPPERS.

From Stewart Lumber Company, Dow City, Iowa.

Can you tell us by whom Compound Lever Cutting Nippers branded "P. S. & W. Co." are made?

Ans.—By Peck, Stow & Wilcox Company, Cleveland, Ohio.

STEEL LAWN SWINGS.

From J. H. Haug, Spillville, Iowa.

Please furnish me with the names of dealers in steel lawn swings.

Ans.—Hutchins Roller Swing Company, Alton, Illinois; National Ventilator Company, 149 South Jefferson Street, Chicago; Pekin Wagon Company, Pekin, Illinois; Bristol & Gale Company, 110 West Washington Street, Chicago.

CAST IRON THRESHOLDS FOR DOORS.

From P. H. Thiel, Renwick, Iowa.

Can you tell me where I can purchase cast iron thresholds for doors that used to be made by the Schenck Fire Back Company of Chicago?

Ans.—We learn that this concern has been out of business for some years and do not know of any place where the thresholds can be purchased.

## ITEMS.

The Cornish tin mining industry is at present enjoying unequaled prosperity, the price of the metal having reached a record figure.

The McKeesport Tin Plate Company, McKeesport, Pa., which now has a plant containing 10 hot mills, will add eight more, making a total of 18.

The Western Stamping Company of Alton, Illinois, has been incorporated, capital stock $5,000, by P. T. Reyland, Charles E. Fulton and Peter Reyland.

Frank Stephens of Carthage, Missouri, recently sold his tin shop in that city and removed to Denver, Colorado, where he is now engaged in selling furnaces.

The Terrell's Equipment Company, recently incorporated at Grand Rapids, Michigan, for the manufacture of metal lockers, steel shelving and sheet metal specialties, has leased a plant and has begun operations.

The Kool Metal Manufacturing Company has been incorporated in New York City and will manufacture metal goods. The capital stock is $25,000. John S. Bushnell, George Young and Frederick O. Kilcham are the incorporators.

The plants of the American Sheet & Tin Plate Company at New Philadelphia and Canal Dover, Ohio, are being enlarged. At least two more mills will be added to each of the plants. This will mean a largely increased number of employes at each place.

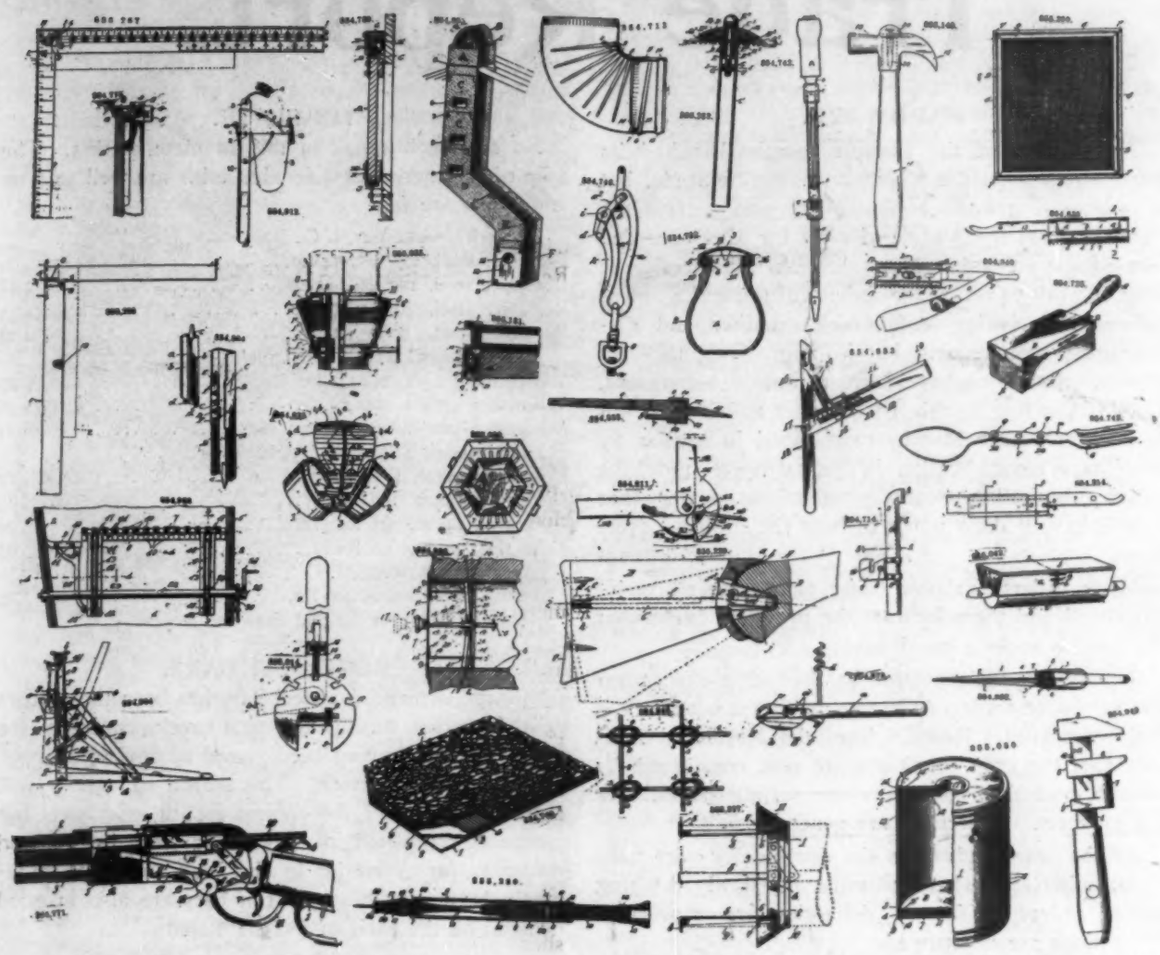
In consequence of the troubles in Russia the exportation of platinum to European markets has been considerably reduced so that at present there is a shortage in the supply. This is felt more seriously because during the last 2 or 3 decades 95 per cent of the world's supply of platinum was drawn from the Ural deposits. The price of platinum, which is now 500 rubles per keg, continues to advance.

A handsome loving cup was presented May 17 to Mr. Walter M. Aikman, president of the Central Stamping Company, 24 Cliff street, New York, in commemoration of the sixtieth anniversary of Mr. Aikman's connection with the metalware business. The directors, officers, clerks and a delegation from the company's factory at Newark, New Jersey, took part in the presentation. The cup was suitably inscribed and evidenced the high esteem in which Mr. Aikman is held by all who come in contact with him.

The copper production of Mexico last year, according to the Engineering and Mining Journal, was 138,208,000 pounds, which figure is adopted as representative of the copper production of Mexico in 1906. The production in 1905 was 144,350,962 pounds. The decrease was due chiefly to the smaller output of the Greene Company. However, the latter continued to be the largest producer of Mexico, the other large producers being the Boleo, Montezuma and Texiutlan Companies. It is probable that the copper production of Mexico will regain its lost ground in 1907.

Many a man has been started on the road to prosperity by a little advertising.

# NEW PATENTS.



854,713—Stovepipe-Fastener. Beaufort C. Brown, Ionia, Kans. Filed June 4, 1906. Serial No. 320,154.

854,725—Woodworking-Tool. Nathan H. Devers, Washington, D. C. Filed Dec. 15, 1906. Serial No. 347,968.

854,740—Composite Roofing. Amzi G. Hennion, Houston, Tex. Filed Oct. 15, 1906. Serial No. 339,132.

854,742—Adjustable Extension-Bit Holder. Charles E. Hill, Foster, Ohio. Filed Jan. 12, 1907. Serial No. 351,943.

854,746—Fastening-Hook. Bruno Knothe, Dömitz, Germany. Filed May 5, 1906. Serial No. 315,447.

754,745—Combined Fork and Spoon. John King, Oakland, Me. Filed Mar. 15, 1906. Serial No. 306,263.

854,771—Automatic Firearm. Charles A. Strassburg, Cridersville, Ohio. Filed Sept. 27, 1906. Serial No. 336,470.

854,775—Gage for Saw-Teeth. Lawrence M. Taylor, Mulvane, W. Va. Filed July 24, 1906. Serial No. 327,572.

854,789—Door-Hanger and Means to Prevent the Swaying of Doors. Joseph Woyak, Milwaukee, Wis. Filed Mar 12, 1907. Serial No. 362,040.

854,811—Wire-Working Tool. Jonas F. Dixon, Carthage, Mo. Filed Apr. 17, 1906. Serial No. 312,258.

854,814—Razor. Thomas C. Durham, New York, N. Y. Filed June 7, 1906. Serial No. 320,551.

854,838—Shovel-Tooth. James A. Parsons, Chicago, Ill. Filed May 19, 1906. Serial No. 317,715.

854,839—Razor. Sydney I. Prescott, New York, N. Y., assignor to Thomas C. Durham, New York, N. Y. Filed Oct. 25, 1906. Serial No. 340,510.

854,840—Razor. Sydney I. Prescott, New York, N. Y., assignor to Thomas C. Durham, New York, N. Y. Filed Jan. 9, 1907. Serial No. 351,418.

854,853—Bevel, Protractor, and Square. Thomas W. Spellman, Worcester, Mass. Filed Sept. 29, 1904. Serial No. 226,506.

854,864—Stair-Carpet Fastener. Warren M. Abbott, Philadelphia, Pa. Filed Aug. 25, 1905. Renewed Mar. 14, 1907. Serial No. 362,411.

854,895—Chimney. Solomon M. Kemp, Baltimore, Md. Filed May 11, 1906. Serial No. 316,398.

854,904—Lifting-Jack. William Osborn and Louis Graeber, Kansas City, Mo. Filed Oct. 2, 1906. Serial No. 337,095.

854,935—Stovepipe-Elbow. James A. Doree, Cloquet, Minn. Filed June 18, 1906. Serial No. 322,170.

854,949—Wrench. Gottlieb K. Holbine, Eustis, Nebr. Filed Sept. 24, 1906. Serial No. 335,919.

854,952—Shears. Charles B. Klein, Denver, Colo. Filed May 31, 1906. Serial No. 319,629.

854,946—Wire-Fence Lock. Ivan R. Hill, Reading, Mich. Filed Jan. 10, 1907. Serial No. 351,735.

854,968—Stove-Grate. Fredrick P. Soupeset, Rocky Ford, Colo. Filed Apr. 5, 1906. Serial No. 310,125.

854,979—Combination Tool. Benjamin F. Bird, Kingston, N. Y. Filed Mar. 28, 1907 Serial No. 364,972.

854,986—Flue-Stopper. James W. De Weese, Hoopeston, Ill. Filed June 27, 1906. Serial No. 323,631.

855,014—Wrench. William McGlone, Mount Iron, Minn. Filed Nov. 3, 1906. Serial No. 341,935.

855,042—Rolling-Pin. Alfred Cattlin, Akarao, New Zealand. Filed Dec. 29, 1906. Serial No. 349,956.

855,055—Lamp-Burner. Alexander H. Handlan, Jr., St. Louis, Mo. Filed Jan. 7, 1907. Serial No. 351,122.

855,080—Sheet-Metal Can. Frederick Westerbeck, St. Louis, Mo. Filed Jan. 2, 1906. Serial No. 294,319.

855,089—Combined Dish and Drip Pan. David E. Bonathan, Lake Linden, Mich. Filed May 1, 1906. Serial No. 314,645.

855,140—Attachment for Hammers. William H. Smalley, Yonkers, N. Y. Filed Feb. 2, 1906. Serial No. 299,102.

855,181—Take-Down Gun. Thomas C. Johnson, New Haven, Conn., assignor to Winchester Repeating Arms Co., New Haven, Conn., a Corporation. Filed Jan. 31, 1907. Serial No. 355,070.

855,229—Gun-Stock. Patrick H. Clarisey, Dalton, Mass. Filed Feb. 15, 1907. Serial No. 357,468.

855,233—Square. Donat S. Cormier, Waltham, Mass. Filed Sept. 13, 1906. Serial No. 334,428.

855,250—Window-Screen. Warren Kemmerling, Hitchcock, Tex. Filed May 29, 1906. Serial No. 319,401.

855,252—Safety-Razor. Edward Krusius, New York, N. Y. Filed Nov. 1, 1905. Serial No. 285,449.

855,257—Carpenter's Square. Joseph A. McCloskey, Mount Vernon, N. Y. Filed Feb. 12, 1907. Serial No. 357,032.

855,280—Interchangeable and Adjustable Screw-Driver and Combined Tool-Holder. Victor E. Campbell, Portland, Oreg. Filed Nov. 14, 1906. Serial No. 343,423.

855,327—Stovepipe-Lock. Thomas Mosley, Lawton, Okla. Filed July 30, 1906. Serial No. 328,490.

# Trade Report.

## HARDWARE.

The coming of the summer months has had its usual effect upon the wholesale hardware trade, but it is gratifying to know that all reports confirm the statement that the volume of sales for May exceeded that of a year ago. Many bearish influences have been at work to retard the activity of the spring, these influences including unfavorable weather and discouraging crop reports, but in spite of all, the fact remains that sales have been uniformly better than in corresponding months of last year and it must not be forgotten that March, 1907, stood in a class by itself as a record-breaker in the hardware trade, the delightful weather generally prevailing during that month having done much to help the business average.

Many orders are now being placed for deliveries far ahead and these indicate the prevalent belief that the year is to be a good one.

The unseasonable weather has had some effect upon the hardware trade in Chicago territory, but there is little complaint. Reports from the Northwest indicate that the crop conditions are now considered favorable and that merchants are feeling better over the prospect. Collections are generally fair.

As the season advances the demand for wire nails is lessening somewhat and mills are slowly catching up on orders as far as deliveries are concerned. Quotations are unchanged.

The Cut Nail Association recently reaffirmed existing prices, and the demand is fairly active. Contract shipments of barb wire are being made in large volume, but there is still much dissatisfaction over delayed deliveries.

An advance in bolts was made last week. The change in carriage bolts amounts to 7½ per cent and in machine bolts to 5 per cent. Some manufacturers of stove and tire bolts have also advanced prices 10 per cent.

Skate straps are in great demand and some manufacturers announce that they will advance their prices for the coming season.

## COPPER.

The New York copper market continues weak, with little business doing and some shading of prices is reported. Quotations are: Lake, 24½c to 25¼c; electrolytic, 23c to 24c; casting, 22¼c to 23c.

In Chicago lake copper continues to sell for 26c, but a fall of 1c occurred in casting copper, the prices dropping to 24½c to 25c.

| Extreme fluctuations for this year: | Highest | Lowest. |
|---|---|---|
| Electrolytic copper, spot | 25½ | 23 |
| Lake copper, spot | 25¾ | 24 |
| Casting copper, spot | 24⅞ | 22 |
| London, spot | £110 15 0 | £91 15 0 |
| London, futures | 112 0 0 | 93 10 0 |
| London, best selected | 118 0 0 | 107 0 0 |

## TIN PLATE.

No change is noted in the tin plate market. The tone of the market is quiet, but mills are well sold up and prices are fair.

| American coke tins, I. C., from store, New York: | |
|---|---|
| Bessemer steel, 107 lbs., 14x20 | $4.55@4.60 |
| Bessemer steel, 100 lbs., 14x20 | 4.40@4.45 |
| Bessemer steel, 95 lbs., 14x20 | 4.30@4.35 |
| Bessemer steel, 90 lbs., 14x20 | 4.20@4.25 |
| Am. charcoal ternes, 8-lb. coating— | |
| Worcester grades, 14x20, 107 lbs. | 4.50@4.55 |
| Worcester grades, 14x20, 100 lbs. | 4.35@4.40 |
| Worcester grades, 20x28, 200 lbs. | 8.25@8.30 |
| For prompt shipment, f. o. b. mill— | |
| Coke tins, 14x20, I. C. | 4.05@4.10 |
| Coke tins, 14x20, 100 lbs. | 3.90@3.95 |
| Coke tins, 14x20, 95 lbs. | 3.85@3.90 |
| Coke tins, 14x20, 90 lbs. | 3.80@3.85 |
| Charcoal ternes, 20x28, I. C. | 7.50@7.55 |
| Charcoal terne, 20x28, 200 lbs. | 7.20@7.25 |

Usual differences for odd sizes and weights.

## MERCHANT BARS.

A large demand for steel bars has been the feature of the market during the past week, contracts for large tonnages having been placed by agricultural implement manufacturers. The season of 1906-7 will close at the end of the present month, with steel bar contracts completed as they never were before, and contracts for deliveries in the year 1907-8 have recently been very heavy. Iron bars are also in good demand on the basis of $1.60 Pittsburg.

## SHEETS.

Some improvement is noted in deliveries of sheets. From ten to twelve weeks' time is now asked by the mills for galvanized and eight to ten weeks for black sheets. There is an active demand and prices are firm.

The following prices are for 500-bundle lots and over, f. o. b. mill:

| | | —Galvanized.— | |
|---|---|---|---|
| Gauge. | Net. | Net. | List. |
| No. 30 | $2.85 | $4.25 | 21 |
| No. 29 | 2.75 | 4.00 | 19 |
| No. 28 | 2.60 | 3.75 | 17 |
| No. 27 | 2.50 | 3.55 | 16 |
| Nos. 25 to 26 | 2.45 | 3.35 | 15 |
| Nos. 22 to 24 | 2.40 | 3.15 | 14 |

## SHEET ZINC.

The price of sheet zinc f. o. b. smelter, wholesale lots, is $8.60, with the usual extras and discounts.

For small quantities out of store, Eastern dealers are quoting $9.10 for cask lots and $9.50 for less than cask lots delivered f. o. b. New York.

A decline in the market would not surprise the trade, owing to recent declines in the price of spelter.

## PIG IRON.

There has been a quiet tone to the pig iron market, but prices are firm all along the line. Little domestic iron remains unsold and foreign prices are also well maintained.

Scattering orders for delivery in the first quarter of 1908 are reported both North and South on the basis of $18.50 Birmingham for Southern No. 2 Foundry and $25 Chicago for Northern No. 2. There is little demand for spot iron, but prices are firm at a minimum of $27 Chicago for Northern No. 2 foundry and $22.50 Birmingham for Southern iron.

BIRMINGHAM MARKET.

| | |
|---|---|
| No. 1 Foundry, 2nd quarter | $22.00@22.50 |
| No. 1 Soft, 2nd quarter | 22.50 |
| No. 2 Foundry, Spot | 22.50@23.00 |
| No. 2 Foundry, 2nd quarter | 22.00@22.50 |
| No. 2 Foundry, 3rd quarter | 21.00@21.50 |
| No. 2 Foundry, last half | 20.00@21.00 |
| No. 2 Soft, 2nd quarter | 21.00@22.00 |
| Gray Forge, 2nd quarter | 19.00@20.00 |

CHICAGO MARKET.

| | |
|---|---|
| Lake Superior charcoal | $ 27.50 |
| Northern Foundry No. 1 | 25.50 |
| Northern Foundry No. 2 | 25.00 |
| Northern Foundry No. 3 | 24.50 |
| Northern Scotch Foundry | 25.50 |
| Ohio Strong Softeners No. 1 | 24.80@25.30 |
| Ohio Strong Softeners No. 2 | 24.30@24.80 |
| Southern Foundry No. 1 | 24.85@26.35 |
| Southern Foundry No. 2 | 24.35@25.85 |
| Southern Foundry No. 3 | 23.85@25.35 |
| Southern Foundry No. 4 | 23.35@24.85 |
| Southern No. 1 Soft | 24.85@26.35 |
| Southern No. 2 Soft | 24.35@25.85 |
| Southern Gray Forge | 22.85@24.35 |
| Southern Mottled | 22.60@24.15 |

PITTSBURG MARKET.

Prompt Delivery Small Lots.

| | |
|---|---|
| No. 2 Northern | $25.85 |
| Gray Forge | 22.85 |
| Bessemer | 24.85 |
| Basic | 24.85 |

Second Half.

| | |
|---|---|
| Bessemer | $23.85@24.35 |
| Basic | 23.85@24.35 |
| Foundry | 23.85@24.35 |
| Gray Forge | 22.85 |
| Gray Forge, Southern | 22.85@23.35 |
| No. 2 Southern | 24.85@25.35 |

Matthew Addy & Company, Cincinnati, will say in their weekly report:

"Business this week has been without any significant feature. It goes without saying that the market is as strong as ever, but nothing has occurred of any paticular moment. There has been considerable buying, but the orders have been mainly for small lots and the purchasing has been thoroughly scattered. Iron has been bought for spot, nearby, last quarter, and next year delivery. Bessemer, basic, mill and foundry metals have been ordered. In fact the buying has covered every department of the trade, and has been so well distributed that it is evident consumption in every branch is at high water mark. Shipments are moving along fairly well, and there is less complaint on this score than there has been for months. It is a great relief to consumers to be able to count on getting their iron on something like contract time. For many months past there has been an immense amount of trouble over delayed shipments, and users of iron were never able to tell what they might expect,—except they knew it was safe to expect the worst. There are no stocks of iron on hand either in furnace or consumers' yards, and it is a matter of the highest moment that shipments go forward now as fast as the iron is made. Fortunately for the trade the railroads are able to handle the output of the furnaces, and consequently things are in much better shape.

"There has been a good deal more excitement in coke than in pig iron. Coke has been bought in large quantities for long forward delivery, and the general feeling is that the recent low prices on this commodity are at an end, and that higher quotations are now the order of the day."

Rogers, Brown & Co., Cincinnati, will say in their weekly report:

"The market this week has been one of somewhat less activity, but absolutely undiminished strength. There has been a fair amount of business done for extended delivery, and all districts report similar conditions. Buyers who have been holding off, playing a waiting game, appear to have made up their mind that they have underestimated conditions and have been buying to the best possible advantage.

"The main feature of interest is the confidently expected early buying movement for 1908. It would seem that the unusual condition now existing in the iron trade in respect to supply and the demand made by buyers at the present time, would force a protective movement for buying during a period ahead, which for length of time has never yet been equaled in this country's iron trade history. First quarter business for 1908 is having quite the call and active buying for the first half will undoubtedly occupy the attention of conservative buyers at an early date.

"Consumers continue to press for shipments of iron previously bought, and are more concerned just now in getting this material on hand promptly than in making further purchases, or buying spot iron at high prices.

"Furnaces are in very much better shape as regards past due contracts than they have been any time this year. Railroad service for the last two months is much improved, and iron to-day is being loaded and shipped as rapidly as it is made. Stocks of iron in furnace yards are slight and the position of furnaces for 1907 is now judged to be positively secure.

"Coke is lively. There is good business being done in furnace and foundry grades. Some leading operators have withdrawn from the market, others insist that all business coming up be submitted to them, and the supply of spot coke appears to be ample for all needs. Prices are at wide variance, but the better brands are proving very popular and the prices obtained for these held firmly."

## CHICAGO OLD METAL MARKET.

| | |
|---|---|
| Clean heavy copper | $20.00 |
| Clean heavy copper wire | 20.00 |
| Light copper | 18.00 |
| Heavy composition | 18.00 |
| Heavy yellow brass | 15.50 |
| Light brass | 12.00 |
| Yellow borings | 13.00 |
| Red borings | 16.00 |
| Heavy lead | 5.40 |
| Tea lead | 4.90 |
| Scrap zinc | 4.90 |
| Block tin pipe | 37.50 |
| Mixed pewter | 29.00 |
| Clean car brasses | 17.00 |
| Stereotype | 7.25 |
| Electrotype | 6.50 |
| Zinc | 4.75 |

## TO MAKE PIG IRON CHEAPER.

In the Pittsburg district the United States Steel Corporation has made its first real move towards remodeling its furnace plants by introducing blast furnace gas engines to be used in making fuel for the furnaces themselves, and in the future the blast furnaces will be operated with their own gas, which in the past has been allowed to escape. The Carnegie Steel end of the Steel Corporation, which of itself has fifty-nine blast furnaces, has placed a large order for the engines with a western firm and the pig-iron-making furnaces will be re-equipped with them as fast as possible.

For many years the problem of saving and utilizing blast furnace gas has been worked on, but it was not until lately that perfection was claimed for the blast furnaces themselves. While it is expected that the cost of the equipment will at this time be very heavy, it is said that it will be more than made up in one year by the cheapening of pig iron production.—New York Commercial.

# Current Hardware and Metal Prices.

**THE AMERICAN ARTISAN AND HARDWARE RECORD is the only publication containing western hardware and metal prices corrected weekly.**

## METALS.

### FIRST QUALITY BRIGHT PLATES.

| | | Per Box |
|---|---|---|
| IC | 14x20 | $7 20 |
| IX | 14x20 | 8 25 |
| IXX | 14x20 | 9 40 |
| IXXX | 14x20 | 10 65 |
| IXXXX | 14x20 | 11 80 |
| IC | 20x28 | 14 50 |
| IX | 20x28 | 16 50 |
| IXX | 20x28 | 18 95 |
| IXXX | 20x28 | 21 35 |
| IXXXX | 20x28 | 23 75 |

### COKE PLATES.

| | | | |
|---|---|---|---|
| Cokes, 180 lbs | IC | 20x28 | $8 50 |
| Cokes, 200 lbs | IC | 20x28 | 9 00 |
| Cokes, 216 lbs | IC | 20x28 | 9 50 |
| Cokes 270 lbs | IX | 20x28 | 11 25 |

### PIG IRON.

| | |
|---|---|
| Lake Sup. Charcoal | $26 00@$26 50 |
| North'n Fdy., No. 1 | 26 00@ 26 50 |
| North'n Fdy., No. 2 | 25 50@ 26 00 |
| North'n Fdy., No. 3 | 25 00@ 25 50 |
| Northern Scotch Fdy. | 26 00@ 26 50 |
| Ohio Strong Softeners, No. 1 | 26 30 |
| Ohio Strong Softeners, No. 2 | 25 80 |
| Southern Fdy., No. 1 | 23 40@ 25 40 |
| Southern Fdy., No. 2 | 22 90@ 24 90 |
| Southern Fdy., No. 3 | 22 40@ 24 40 |
| Southern Fdy., No. 4 | 21 90@ 23 90 |
| Southern No. 1 Soft | 23 40@ 25 40 |
| Southern No. 2 Soft | 22 90@ 24 90 |
| Southern Gray Forge | 21 40@ 23 40 |
| Southern Mottled | 20 90@ 22 90 |
| Southern Silveries, 4 to 6 per cent Silicon | 27 40@ 29 90 |
| Jackson Co. Silveries, 8 to 10% Silicon | 31 40@ 33 40 |
| Ala. and Geo. Car Wheel | 28 40@ 28 90 |
| Malleable Bessemer | 25 50@ 26 50 |
| Standard Bessemer | 25 50@ 26 50 |
| Basic, Pittsburg | 22 85 |

### BLACK STEEL SHEETS.

| | |
|---|---|
| Nos. 11-12 | per 100 lbs 3 60 |
| Nos. 13,14 | per 100 lbs 3 65 |
| Nos. 15-16 | per 100 lbs. 3 70 |
| Nos. 17-21 | per 100 lbs. 3 75 |
| Nos. 22-24 | per 100 lbs. 3 80 |
| Nos. 25-26 | per 100 lbs. 3 85 |
| No. 27 | per 100 lbs. 3 90 |
| No. 28 | per 100 lbs. 3 00 |

### GALVANIZED.

| | |
|---|---|
| Nos. 10-11 | per 100 lbs. $3 15 |
| Nos. 12-14 | per 100 lbs. 3 25 |
| Nos. 15-16 | per 100 lbs. 3 35 |
| Nos. 17-21 | per 100 lbs. 3 50 |
| Nos. 22-24 | per 100 lbs. 3 65 |
| Nos. 25-26 | per 100 lbs. 3 85 |
| No. 27 | per 100 lbs. 4 05 |
| No. 28 | per 100 lbs. 4 25 |

### POLISHED SHEET STEEL.

| | |
|---|---|
| No. 24 | per 100 lbs. $4 90 |
| No. 26 | per 100 lbs. 5 00 |
| No. 27 | per 100 lbs. 510 |
| No. 28 | per 100 lbs. 520 |

### SMOOTH STEEL.

| | |
|---|---|
| Wood's Smooth, No. 20 | $3 05 |
| " " No. 22-24 | 3 10 |
| " " No. 25-26 | 3 15 |
| " " No. 27 | 3 20 |
| " " No. 28 | 3 30 |

### PATENT PLANISHED SHEET IRON

Patent Planished Sheet Iron. "A" $10 20, "B" $9 20

### PATENT PLANISHED SHEET STEEL.

Dickey Planished Sheet Steel....8½c

### SOLDER.

| | |
|---|---|
| XXX Guaranteed ½ & ½ | per lb. 26½c |
| Commercial ½ & ½ | per lb. 20 c |
| No. 1 Plumbers | 24½c |

### SHEET ZINC.

| | |
|---|---|
| 600 lb. Cooks | case, per cwt. 9 50 |
| 500 lb. Cooks | per cwt, 9 50 |
| Sheets | per cwt. 10 50 |

### COPPER.

Copper, sheet, 100 lbs. over, base, 32c

### TIN PIGS AND BARS.

| | |
|---|---|
| Banca, pigs, per lb | 44c |
| Straits, pigs, per lb | 44½c |
| Straits in bars, per lb | 47c |

### LEAD.

| | |
|---|---|
| American Pig | 6¾ |
| Bar | 7½c |
| National (White) brands (in less than 100 lb. lots), per lb | 8½c |

*Sheet.*

| | |
|---|---|
| Full coils | per 100 lbs. $9 00 |
| Cut coils | per 100 lbs. 9 50 |

## HARDWARE.

### ADZES.

| | |
|---|---|
| *Carpenters'.* | |
| Plumbs | 40&10% |
| *Coopers'.* | |
| Barton's | 20% |
| White's | 15% |
| *Railroad.* | |
| Plumbs | 40&7½% |
| *Ship.* | |
| Plumbs | 40% |
| White's | 12½% |

### AMMUNITION.

| | |
|---|---|
| *Caps, Percussion—per 1,000.* | |
| F. L. Waterproof, 1-10s | 40c |
| G. D. | 35c |
| Musket | 60c |
| *Cartridges.* | |
| Winchester Rim Fire Ctgs | 50&33% |
| Winchester Cent Fire, Pistol and Rifle | 25&3% |
| Winchester Cent Fire, Military and Sporting Ctgs | 15&3% |
| Winchester Blank Ctgs. 22 cal. | $1 25 |
| Winchester Blank Ctgs. 32 cal., C. F. | 4 60 |
| Winchester BB Caps, Rnd. ball | 1 50 |
| Winchester BB Caps, Conical ball | 1 95 |
| Winchester Cent. Fire, Military and Sporting Ctgs | 15&3% |
| *Primers.* | |
| Berdan Primers | $1 00 |
| Winchester Primers | 30% |
| *Shells.* | |
| New Rival Empty Paper Shells, 10 and 12 gauge | 35% |
| New Rival Empty Paper Shells, 16 gauge | 30% |
| Repeater Empty | 30% |
| Leader Smokeless | 25% |
| Winchester Repeater Loaded Shells | 40&5% |
| Winchester Leader | 40-10&10% |
| New Rival Loaded Shells | 33⅓ & 11% |
| *Gun Wads—per 1,000.* | |
| Winchester Gun Wads | 15% |

| *Powder.* | Each |
|---|---|
| DuPont's Sporting, kegs | $8 50 |
| " " ½ kegs | 2 50 |
| " " ¼ kegs | 1 40 |
| Dupont's Sm'k'less. 50-lb. drum | 22 45 |
| " " 25-lb. kegs | 11 3 |
| " " 12½-lb. kegs | 5 80 |
| " " 6¼-lb. kegs | 2 97 |
| " " 1-lb. cans | 15 |

| *Shot.* | |
|---|---|
| Drop shot, sizes smaller than B, 25-lb. bags, per bag | 1 95 |
| Drop shot, B and larger sizes, 25-lb. bags, per bag | 2 20 |
| Buck Shot, 25-lb. bags, per bag | 2 20 |
| Chilled Shot, 25 lb. bags, " | 2 20 |

### ANCHORS.

Expansion Screw Anchors.....10%

### ANVILS.

| | |
|---|---|
| Trenton, 70 to 80 lbs | 9½c per lb |
| Trenton, 81 to 150 lbs | 9½c per lb |

### ASBESTOS.

Board and Paper.....25%

### AUGERS.

| | |
|---|---|
| *Boring Machine* | 70% |
| Irwin's | 40&10% |
| *Carpenters' Nut* | 70% |
| *Hollow.* | |
| Bonney's—list $30.00 | 75&5% |
| Stearn's, No. 3 | 36 00 |
| *Post Hole.* | |
| Digwell, 8-inch per doz. | 13 50 |
| Iwan's Post Hole and Well | 40% |
| Vaughan's, 4 to 9-in., per doz. | 6 25 |
| *Rafting.* | |
| Snell's | 50&5% |
| *Ship.* | |
| Ford's, with or wi'out screw | 40-12½% |
| Snell's, " " " | 40-5% |

### AWLS.

| | |
|---|---|
| *Brad.* | |
| No. 3 Handled per doz. | $0 40 |
| No. 1050 Handled " | 80 |
| Shouldered, assorted, 1 to 4, per gro. | 1 20 |
| Patent asst'd, 1 to 4 " | 85 |
| *Harness.* | |
| Common " | 95 |
| Patent " | 90 |
| *Peg.* | |
| Shouldered per gro, | $1 20 |
| Patent " | 60 |
| *Scratch.* | |
| No. 1, handled " | 4 80 |
| No. 15, socket handled. per doz. | 1 25 |
| No. 7 Stanley " | 1 80 |
| *Sewing.* | |
| Common per gro. | 90 |
| Patent " | 90 |

### AXES.

| | |
|---|---|
| *Boy's Handled.* | |
| Lippincott, 3 lb per doz. | $5 25 |
| Falls City " | 5 25 |
| *Broad.* | |
| Plumbs, West, Pat | 40-3½% |
| " Can. Pat | 40-7½% |
| " Firemen's (handled). per doz | $18 75 |
| Plumbs, Miners (handled) " | 6 75 |
| *Single Bitted* (handled). | |
| Gladiator 3 to 4 lbs., pr dz. | $11 00 |
| Flint Edge " " " | 9 25 |
| Standard " " " | 9 25 |
| Elec. Chopper, Forest Clipper | 10 50 |
| Perfect Premier " " | 10 00 |
| Crown " " " | 7 00 |
| *Single Bitted* (without handles). | |
| Gladiator 3 to 4 lbs. per doz. | $8 25 |
| Flint Edge " " | 6 75 |
| Standard " " | 6 75 |
| Electric Chopper " " | 8 00 |
| Perfect " | 7 50 |
| Crown " " | 6 00 |
| *Double Bitted* (without handles). | |
| Gladiator 3 to 4 lbs. per doz. | $11 25 |
| Flint Edge " " | 9 50 |
| Perfect " " | 10 75 |

The above prices on axes of 3 to 4 lbs. are the base prices.

3½ to 4½ lbs. advance 25c.
4 to 5 lbs. advance 50c.
4½ to 5½ lbs. advance 75c.

### BAGS, PAPER NAIL.

| Pounds | 10 | 16 | 20 | 25 |
|---|---|---|---|---|
| Per 1,000 | $2.50 | 2.75 | 4.50 | 5.00 |

### BALANCES, SPRING.

| | |
|---|---|
| Frary's | 50% |
| Pelouze | 30% |

### BARS, CROW.

Pinch or Wedge Point.....cwt. $3 25

### BASKETS.

| | |
|---|---|
| *Clothes.* | |
| Small Willow per doz. | $6 25 |
| Medium " " | 7 25 |
| Large " " | 8 00 |
| *Galvanized Iron.* ½ bu. | 1 bu. 1½ bu. |
| Per doz. | $4 75 6 50 8 00 |

### BEATERS.

| *Carpet.* | Per doz. |
|---|---|
| No. 10 Coppered Spring Wire | $0 90 |
| No. 12 Spring Wire | 1 10 |
| No. 10 Preston | 95 |
| *Egg.* | Per doz |
| No. 50 Imp. Dover | $0 70 |
| No. 102 " " tinned | 85 |
| No. 150 " " hotel | 1 40 |
| No. 10 Heavy hotel tinned | 3 10 |
| No. 13 " " " | 3 20 |
| No. 15 " " " | 3 60 |
| No. 18 " " " | 4 50 |

### BELLOWS.

| | |
|---|---|
| *Blacksmiths'* | 65% |
| *Hand.* | |
| 8 inch per doz. | $7 50 |
| 10 inch " | 9 50 |
| *Moulders'.* | |
| 12 inch " | 11 00 |

### BELLS.

| | |
|---|---|
| *Call.* | |
| 3 in. Nickeled Rotary Bell, bronzed base per doz. | $5 00 |
| *Cow.* | |
| High Grade | 60&10% |
| Kentucky | 70&10% |
| *Door.* | Per doz. |
| New Departure Automatic | $6 00 |
| Rotary. | |
| 3 in. Old Copper Bell | 4 00 |
| 3 in. Old Copper Bell, fancy | 6 00 |
| 3 in. Nickeled Steel Bell | 4 50 |
| 3½ in. Nickeled Steel Bell | 5 00 |
| *Hand.* | |
| Hand Bells, polished | 50% |
| White Metal | 50% |
| Nickel Plated | 40% |
| Swiss | 40&10% |
| Silver Chime | 33⅓% |
| *Miscellaneous.* | |
| Church and School, steel alloy | 50&10% |
| Farm, lbs. 40 50 75 | 100 |
| Each $1.25 1.60 2.25 | 2.85 |

### BEVELS, TEE.

| | |
|---|---|
| Stanley's, rosewood handle, new list | 35% |
| Stanley's iron handle | 35% |

### BINDING, OILCLOTH.

| | |
|---|---|
| Zinc | 80% |
| Brass | 70&10% |
| Brass Plated | 75&5% |

### BITS.

| | |
|---|---|
| *Auger.* | |
| Extra Double Spur | 70&10% |
| Ford's Car and Machine | 40&12½% |
| Triumph | 50&5% |
| Ford's Ship | 40&12½% |
| Irwin | 50&5% |
| Russell Jenning's | 35&10% |
| Clark's Expansive | 50-10&5% |
| Steer's " Small list, $22.00 | 35% |
| " Large " $25.00 | 35% |
| Irwin Car | 45% |
| Ford's Ship Auger pattern Car | 40&12½% |
| *Center* | 40&10% |
| *Countersink.* | |
| No. 18 Wheeler's per doz. | $1 25 |
| No. 20 " " | 1 75 |
| American Snail head. " | 75 |
| " Rose " | 90 |
| " Flat " | 75 |
| Mayhew's Flat " | 1 25 |
| " Snail " | 1 25 |
| *Dowel.* | |
| New Jennings | 40&10% |
| *Gimlet.* | |
| Standard Double Cut | 60% |
| German Pattern per doz. | $0 60 |
| German " | 65 |
| Gouge " | 80 |
| Spoon " | 80 |
| Countersink " | 1 00 |
| *Reamer.* | |
| Jenning's Square " | 2 50 |
| Standard Square " | 75 |
| German Octagon " | 75 |
| *Screw Driver.* | |
| No. 7 Common " | 50 |
| No. 1 Triumph " | 1 25 |
| No. 2 " " | 1 50 |
| No. 340 Shepardson's " | 1 25 |
| No. 1 Smith's " | 1 25 |

BLACKING, STOVE . See Polish

BLADES, SAW.

*Butchers'.*
Standard ⅞ & 1¼ in.....40%
Clock Spring.....40%
Star.....15%
Coil.....each $1 50

*Hack.*
Disston's.....25&5%
Flexible.....33⅓&5%
Star.....20&5%

*Wood.*
Jackson's.....per doz. $2 25
Disston's—No. 6, 16, 26 & 045.. 4 25
Triumph..... 3 50
Forest Clipper..... 3 0

BLOCKS.

*Snatch.*
Wooden.....60&10%
Steel.....50%

*Tackle.*
Iron Strapped.....70&10%
Com. Steel.....60&10%

BOARDS.

*Stove*.....40%

*Wash.*
Globe, single.....per doz. $3 15
" double..... " 3 65
Magnolia..... " 3 55
Crystal Glass..... " 4 35
Brass King..... " 4 50
Nickel Plate..... " 4 15
Enamel King..... " 4 35

BOBS, PLUMB.

*Carpenters'.*
No. 2, iron.....per doz. $0 65
No. 00, " ..... " 1 30
No. 0, " ..... " 1 80
No. 3, lead..... " 2 90
No. 4, " ..... " 3 40
No. 112, brass plated. " 1 10
No. N30, nickel plat'd " 1 30
No. N31, " " " 1 65

BOLTS

*Carriage, Machine, Etc.*
Carriage ⅝x6 and sizes smaller and shorter.....70&5%
Carriage, sizes larger and longer than ⅝x6.....50%
Machine, ⅝x4 and sizes smaller and shorter.....70&10%
Machine, sizes larger and longer than ⅝x⅝x4.....60&5%
Elevator.....50-10&5%
Plow.....60&10%
Stove.....80&10%
Tire.....75&5%
Wagon Box Strap.....70%

*Mortis Door.*
Gem, iron.....60%
" bronze plated.....20%

*Barrel.*
Cast.....60%
Wrought.....
" Bronzed.....50%

*Flush.*
Wrought.....50&10%

*Spring.*
Wrought.....
" Heavy.....

*Square.*
Cast.....50&10%
Wrought.....

BORERS.

*Angular.*
Miller's Falls.....per doz. $13 00

*Bung.*
Doz.
Enterprise Mfg. Co.'s No. 1....$14 00
" " " No. 2.....18 50

BOXES.

*Mail*, No..... 1 2 10
Per doz..... $3.50 5.50 17.50

*Miter.*
New Langdon.....15&5%
Stanley's.....30%
Seavey's.....each $1 50

BRACES.

Barber's.....50&10&10@50&10&15%
Fray's Genuine Spofford's.....60%
" Nos. 66 to 146.....50%
" No. 0108.....$3 50
" No. 06.....2 75
" No. 010.....2 85

BRACKETS.

*Hay-Rack.*
Wenzelmann's No. 1 per doz. $9 00
" No. 2 " 9 60

*Shelf.*
Cast Iron, Bronzed..... 50, 10, 5%
Griffin Wrought Steel.....75%
" Folding.....70%

BROILERS.

Wire.....70%
No. Cwron Self-Basting. $0

BUCKETS.

*Pump Rubber.*
Wychoff.....per gr. $4 75
Cooper..... " 4 7
Champion..... " 7 50
Victor..... " 9 25
Star..... " 5 00
IXL..... " 6 75

*Well.*
Galv'd Qts..... 10 12 14
Per doz..... $2.90 $3.25 $3.40
Wooden, top ear, plain, per doz 4 00
" " swivel " 5 10

BUCKS, SAW.

Folding.....per doz. $3 10

BURRS, RIVETING.

Copper Burrs only.....15%
Tinners' Iron Burrs only.....70%

BUTTS.

*Cast Iron*.....70&5%
*Wrought Brass* (New List).....30%
*Wrought Steel Bright.*
*Wrought Steel, Japanned.*
Nos. 731 an .....70%

IPERS.

Double.....65&5%
Inside and Outside.....65&5%
Wing.....70%

CALKS.

*Logger's Boot.*
(Lufkin R. Co.'s), per M.....$3 75

*Toe.*
Shoenberger.....per ℔ 5 c
Bessemer..... " 4½c
American..... " 7 c
Swedes..... " 8½c

CANS.

*Cheese Factory.*
Ontario Pattern.
Gallons..... 20 30 40
Each..... $4.25 $5.00 $6.25

*Milk.*
Holstein.
Nos..... 300 301 302
Gals..... 5 8 10
Per doz..... $26.00 $27.00 $29.00
Chicago Pattern.
Nos..... 105 108 110
Per doz..... $20.00 $22.50 $24.00
Iowa Pattern.
Nos..... 408 410
Per doz..... $24.50 $25.50
New Elgin Pattern.
Nos..... 705 708 710
Per doz..... $27.00 $29.00 $30.50
Burn Pattern.
Nos..... 700 701
Gals..... 8 10
Price..... $2.40 $2.65

CAN OPENERS.

See Openers.

CAPS, GUN.

See Ammunition.

CARPET STRETCHERS

See Stretchers.

CARRIERS.

*Hay.*
Diamond, Regular.....each $3 50
Diamond, Sling..... " 6 50
Myers' Imperial..... " 3 50
" Clover Leaf..... " 3 65

CARTRIDGES.

See Ammunition.

CASTERS.

*Standard*—Ball Bearing.....50&10%
*Bed*.....60&5%
*Common Plate.*
Brass Wheel.....60&10%
Iron and porcelain wheels, new list.....60&5%
Philadelphia Plate, new list.....70%
Martin's.....60%
Payson's.....75&10%

CATCHERS, GRASS.

Carroll s No. C..... ..per doz. $4.25
Wildermuth's
Nos..... 1 2 3
Per doz..... $5.60 $8.75 $6.25
Nos..... 4 5 6
Per doz..... $8.75 $9.50 $10.00

CHAIN AND CHAINS.

*Breast Chains.*
Doubleslack.....doz. pairs $5 75
With Covert snaps. " 5 00
With slide..... " 3 25
Without slide..... " 3 85
*Bright Oz Chains.*
⅛in. $7.25; ⅜ in. $5.45 per 100 lbs.

*Cable Coil Chain.*
Inch..... 5/16 ⅜ 7/16 ½
Per 100 lbs..$10.50 $8.00 $7.00 $6.20
Inch..... 9/16 ⅝ ¾ ⅞
Per 100 lbs.. $6.00 $5.90 $5.75 $5.65
Inch..... ⅞ 1 1¼
Per 100 lbs.. $5.55 $5.55 $5.65

*Cable Log Chain.*
Advance 25c per 100 lb. on Cable Coil

*Cow Tie Chains.*
American 3 toggle.....50&5%
" toggle and snap...50&5%
" open & closed ring, 50&5%

*Halter Chains.*
American, new list.....33⅓%
German.....50&10&5%
Niagara, new list.....40&5
Brown's, " .....40%

*Picture Chains.*
Light Brass, 3 ft.....per doz. 55c
Heavy Brass, 3 ft..... " 90c

*Pump Chain.*
Galvanized, per 100 lbs.....$5.50

*Safety Chain.*
Brass.....60%

*Special Steel Loading Chain.*
Inch..... ½ 7/16 9/16
Per 100 lbs... $16.00 $12.50 $12.50

*Stretcher Chains.*
7/16 in. $8.50; ½ in. $7.75 per 100 lbs.

*Tie-Out Chains.*
Brown's.....70&10%

*Trace Chains.*
Western Standard.
6½— 6-2.....per pair 30c
6½— 8-2..... " 34c
6½— 8-3..... " 33c
6½—10-2..... " 38c
7 — 8-2..... " 38c
7 —10-2..... " 43c
7 —10-1..... " 48c
7 —10-0..... " 60c
Add 2c per pair for Hooks.
Add 2c " for Twist Link.

*Wagon Stay Chains.*
Inch..... ½ 7/16 ⅝
Per 100 lbs... $6.50 $6.00 $5.50

CHALK, CARPENTERS'.

Blue.....per gross 75c
Red..... " 65c
White..... " 55c
Common White Sch'l Crayon..... 8c

CHARCOAL

In bags.....per bag 90c

CHECKS, DOOR.

Blount.....33⅓%
Sargent's.....33⅓%

CHIMNEY TOPS.

Iwan's Volcano.....50%

CHISELS.

*Box,*
Inches..... 10 12 14
Round, per doz. $2.10 $2.25 $2.75
Flat " 2.85 3.60 4.20

*Cold.*
Good quality, ⅛ in. and larger.....per ℔ 12c
Smaller size per doz.

*Socket, Framing and Firmer.*
Barton's.....20%

*Tanged, Firmer.*
With handles.....30&5%

*Choppers, See Cutters, Meat.*

CHUCKS, DRILL.

Goodell's, for Goodell's Screw Drivers.....per doz. $6 25
Yankee, for Yankee Screw Drivers..... 5 00

CHURNS.

Anti-Bent Wood, Gal.. 5 7 10
Each.....$3.90 $4.60 $4.85
Belle, Barrel .....65-7½%
Common Dash, Gal.. 4 5 6
Per doz.....$7.75 $8.50 $10.50
Union, Gal..... 5 7 10
Each..... $3.65 $3.90 $4.75

CLAMPS

*Adjustable.*
Martin's.....30%

*Carpenters'*
Steel Bar..... ....35%

*Hose.*
Sherman's, brass, ½ in., per doz..33c
Double, brass, ¾ in., " 65c

*Saw Filers.*
Disston's list, $30.00.....30%
Stearn's, No. 0, $8.50; No. 1, $11.50; No. 3, $5.00 doz.
Wentworth's. No. 1 $5.00; No. 3 $7.50

CLAWS, TACK.

Cast, wood hdle.....per doz. 45@60c
Forged steel, wood hdle " $0.80
Solid Steel..... " 1.60
Giant..... " .90

CLEANERS.

*Drain.*
Iwan's Adjustable.....55%
Iwan's Stationary.....40&5%

*Pot.*
Wire..... per doz. $0.55

*Side-walk.*
Steel..... per doz. $3.25
XLCR.....65&5%

CLEAVERS.

*Family.*
Griffin, In..... 6 7 8
Per doz..... $5.50 $5.75 $6.25
Royal.....per doz. 3 25

*Butchers.*
Beattys, Kitchen.....40%

CLEVISES.

Malleable..... .....5c ℔

CLIPPERS.

Bolt.....$1.90@$4.75

CLIPS.

*Axle*.....65&5%

*Damper.*
Standard.....per doz. 65c
Troy..... " 35c
*Hame*..... " 17c

CLOTH.

*Emery.*
Star.....50%
B. & A.....50%

*Hardware Wire*—full rolls (100 ft.)
2 to 8 mesh black, per 100 sq. ft..$2
9 to 12 " " " 3
2 to 3 incl., Galv.—in full roll...3 75
4 and 5..... " .....4 00
6..... " .....4 25
7 and 8..... " .....4 75

*Screen Wire.*
12 mesh, painted, per 100 sq. ft.. 1.35

COCKS AND FAUCETS.

Compression Plain Bibbs.....60%
Lever Bibb Cocks.... .....60%
Compression Hose Bibbs. 50-10&5%
Telegraph Faucets (new list)...50-5%
Racking Cocks (new list).....60%
Compression Lock C'ks(n'w list).70%
Andrew's Brass Faucets .....70%
Angle Plug Faucets, per doz....$0.85
Milk Can Faucets, per doz...$3.60-4.20
Petroleum Faucets .....75%

COLLARS, STOVE PIPE.

Inches..... 5 6 7
*Plain Tin*....per gro. $1.90 $2.40 $2.50
*Japanned Tin* " 3.00 3.00 4.25
*Lacquered Brass* " 3.00 3.50 4.25

COMBS, CURRY.

Nos 000 11 15 39 89 108
Per doz.$0.37 .60 1.00 .90 1.15 .80
Nos .... 220 230 390 532 630 1400
Per doz.$1.05 .85 1.35 1.20 .75 1.40

COMPASSES.

*Carpenters'*.....60-10-10%
*Pencil*—Faber's.....per doz. $1.00

COPPER—See Metals.

COPPERS.

*Soldering.*
1 ℔.....per ℔ 41c
1½ ℔.....33c 2 ℔.... " 37c
3 ℔ and larger..... " 34c

CORD.

*Picture.*
White Wire (new list) ....80-10-10%

*Sash.*
Baltic Braided Flax.....per ℔
Silver Lake, white 7-32 in. "
" " " 8-32 in. "
Keystone .....8-32 in. " 28½c

CORKSCREWS.

Humason & Beckley.....33⅓%
Walker's.....33⅓%
Williamson's Regular.....40&10%
Williamson's Forged Worm.....50%

COTTERS, SPRING.

All sizes—new list.....90&30%

COUPLINGS, HOSE.

Brass.....per doz. $
Brass Plated..... " .85

COVERS, WAGON—See Tents

CRADLES, GRAIN.

Morgan's Grapevine ... per doz. 28

CRAYONS—See Chalk.

CROW BARS.

Pinch or Wedge Point, per 100 lbs. $3.25

CUTTERS.

*Glass.*
Red Devil ..... 45%
Smith & Hemenway Co. ..... 50%
Woodward ..... 40%
*Meat.*
Enterprise Nos. 5, 10, 12, 22, 32 and 42 ..... 25%
No. 202, list, $1.50 ea. ..... 40&7½%
*Pipe.*
Stanwoods ... No. 1 2 3
Each ..... $0.85 $1.50 $4.00
*Slaw and Crout.*
3-knife Crout ..... per doz. $9 75
1-knife Slaw ..... " 1 65
2-knife " ..... " 2 85
*Washer* ..... " 7 75

DAMPERS, STOVE PIPE.

Standard ..... 50&10%
American ..... 45&10%

DIES AND STOCKS

Discount ..... 40&5%
King's, Little Giant ..... 33⅓%

DIGGERS.

*Post Hole.*
Acme ..... per doz. $ 9 25
Atlas ..... " 9 00
Eureka ..... " 7 50
Hercules ..... " 10 25
Iwan's Split Handle .. " 7 50
Iwan's Perfection ..... " 9 00
Iwan's Hercules pattern " 10 00
Ryan's ..... " 17 00
See also Augers—Post Hole.
Dividers, Wing ..... 65&10%

DOOR CHECKS—See Door.

DOORS, SCREEN.

⅞ in. 4-panel painted, per doz. $7 90
1⅛ in. " " " 9 50
1⅛ in. 3-panel natural pine, fancy ..... per doz. 13 40

DOOR HANGERS—See Hangers.

DRILLS.

*Bit Stock* ..... 60&10%
*Blacksmith's Twist* ..... 60%
*Breast.*
Common ..... each, $2 25
Millers Falls ..... " 3 10
*Hand*
Goodell's Automatic.
Nos. ..... 01 02 3 20
Per doz. .. $7.75 $12.50 $12.50 $11 00
Goodell's Single Gear per doz. 15 75
Millers' Falls " " " 12 75
" " Double " " 15 25
*Reciprocating.*
Goodell's ..... per doz. $16 50
*Bit Stock.*
Standard List ... 60&5%@60%@10%

DRIVERS, SCREW.

Standard ..... 65&10%
Lock Ferrule ..... 60%
Champion ..... 50%
" Pattern ..... 70%
Clark's Interchangeable ..... 30%
Edison ..... 60%
Reed's Lightning ..... 45&5%
Goodell's Spiral ..... 50, 10, 5&2½%
Yankee Ratchet ..... 50%
" " Spiral ..... 50&10%
Smith & Hemenway Co. ..... 40&5%

EAVES TROUGH. GALVANIZED.

Territory. L. C. L.
Eastern ..... 70&30%
Central ..... 75&10&2½%
Southern ..... 75&7½%
Western ..... 75&7½%
S. Western ..... 75%
Terms, 2% for cash. Factory shipments generally delivered.
See also conductor pipe and elbows.

EGG BEATERS—See Beaters.

ELBOWS.

*Adjustable Stove.*
Inches ..... 5 6 7
Smooth, per doz. $0.70 $0.75 $1.10
Plan'd " 1.80 2.00 2.65
*Corrugated Conductor.*
Discount ..... 80%
*Corrugated Stove.*
Inches ..... 5 6 7
Smooth, per doz. $0.70 $0.80 $1.30
Pol'd " 1.30 1.40 2.10
Plan'd " 2.00 2.20 3.00
*Four-Piece Stove.*
Inches ..... 5 6 7
Smooth, per doz. 0.60 $0.65 $0.95
Planished " 1.40 1.70 2.35

EMERY CLOTH—See Cloth.

EMERY, TURKISH.

Size ..... 5-lb. pkgs. ¼ kegs, kegs
No. 60 to 150, per lb. 6c 4c 4c
Flour ..... " 5c 3c 3c

ENAMEL, IRON.

Nubian, ½-pt. cans ..... per doz. 1 65
Peerless ..... 1 25

EXTRACTORS. PIG.

See Forceps, Pig.

EYES.

*Bright Wire Screw*—See Goods, B. W
*Drifting Pick* ..... 60, 10&5%
*Hooks and—*
Brass ..... 50&10%
Iron ..... 70%

FASTENERS, STORM SASH

Schroeder's ..... per doz. 85
Sensible ..... 1 15

FAUCETS—See Cocks.

FILES AND RASPS.

Delta ..... 70%
Disston's ..... 75&10%

FLUE STOPPERS—See Stoppers.

FORCEPS, PIG.

Superior ..... per doz. $4 75
Whisson's Imp ..... " 5 25

FORKS.

These goods are sold net this year.
*Barley.*
Steel, New List ..... 65&10%
Wood, 4 tines, per doz. ..... $5.00
*Coal, Coke, Cottonseed* ..... 33⅓&5%
*Hay,*
2 tine ..... 60&10%
3 " ..... 65%
4 " ..... 65&7½%
Digging ..... 70%
Scoop ..... 33⅓%
*Header.*
3 tine ..... 65%
4 " ..... 65%
*Manure.*
4 tine ..... 60&10%
*Ore* ..... 40%
*Spading.*

FRAMES.

*Hack Saw.*
Union ..... per doz. $5 75
Jenning's adj. ..... " 7 50
Cast ..... " 2 50

FREEZERS, ICE CREAM.

*Arctic.*
Qts. ..... 1 2 3 4 6
Each ..... $1.10 1.30 1.50 1.80 2.30
Qts. ..... 8 10 12 15
Each ..... $2.95 3.80 4.50 5.30
*White Mountain.*
20 qt., New Platform ... each $19 10
25 qt., " " " 22 60
25 qt., Sampson Power . " 43 50
40 qt., " " " 58 25

GAUGES.

*Butt and Rabbet.*
*Cream Pail.*
Fairmont ..... per doz. $3 75
*Marking, Mortise, etc.* .....
..... 50&10%
*Saw.*
*Wire.*
Disston's ..... 25%

GIMLETS.

Discount ..... 35@40%

GLASS, WINDOW.

First two brackets ..... 90&5%
Above " " ..... 90%

GLASSES, LEVEL.

GLUE.

*Bulk.*
B Amber ..... per lb. 12 c
A White ..... " 15 c
H. S. Amber ..... " 16½c
*Liquid.*
Army & Navy ..... 40%
Le Page's—
List "A" ..... 37½%
List "B" ..... 33⅓%
List "C" ..... 25%

GOODS.

*Bright Wire* ..... 35&15%

GREASE, AXLE.

*Wood Boxes.*
Diamond ..... per gro. 5 50
Frazer's ..... 9 50
Hub Lightning ..... 5 25
Paragon ..... 6 75
*Wood Pails.*
Frazer's, 15 lb. 80c; 25 lb. $1.30 each
Hub Lightning, 15 lb. 55c; 25 lb. 70c each.
*Tin Cans.*
Chamellene Graphite.
1 lb. per gross ..... $9 50
3 lb. per gross ..... 25 00
5 lb. per gross ..... 37 00

GRIDDLES.

*Soapstone* ..... 50%

GRINDSTONES.

*Family.*
Inches ..... 7 8 9
Per doz. ..... $8.25 9.00 10.50
*Loose.*
Per ton ..... $20 00@$21 00
*Mounted.*
Ball Bearing ..... 1 2 3
Each ..... $3.15 3.00 2.85
Common Bearing .. 1 2 3
Each ..... $3.00 2.80 2.65

GUN WADS.
(See Ammunition.)

HAFTS, AWL.

*Brad.*
Common ..... per doz. $0 19
*Peg.*
Common ..... " 22
Patent, plain top .... " 47
" leather top ... " 52
*Sewing.*
Common ..... " 22
Patent ..... " 52

HALTERS.

Jute Rope ..... per doz. $0 85
Sisal Rope ..... " 1 85
Web ..... " 1 75
Leather, rope tie ..... " 7 50
" leather tie .... " 10 00

HAMMERS, HANDLED.

*Blacksmiths' Hand.*
Plumbs ..... 60&5%
*Engineers'.*
Plumbs ..... 60&5%
*Farriers'.*
Plumbs ..... 40&12½%
*Machinists'.*
Plumbs ..... 60&5%
*Nail.*
Plumbs ..... 40&7½%
Quaker City ..... per doz. $3 50
Cast ..... " 1 15
Maydole's ..... 30&5%
*Riveting.*
Plumbs ..... 40&12½%
*Shoe.*
Cast ..... per doz. 75c
*Tack.*
All Iron ..... per doz. $0 35
Pol'd Iron, Hickory hdl. " 50
Mall. Iron, Inlaid ..... " 1 55
Magnetic ..... 1 2 3
Per doz ..... 70c 80c $1.00
Magazine ..... per doz. $4 75

HAMMERS, HEAVY.

*Heavy Hammers and Sledges.*
Under 5 lbs ..... 75&5%
5 lbs. and over ..... 75-10&5%
*Masons'.*
Single & Double Face ..... 75&5%

HANDLES.

*Auger.*
Common Assorted ... per doz. $0 38
Peck's Adjustable ... " 2 10
Ives' " .... per set 1 35
*Axe* ..... 60%
*Chisel.*
Hickory, Tanged Firmer, Assorted, 23c; Large, 28c per doz.
Hickory, Socket Firmer, Assorted, 27c; Large, 30c per doz.
Applewood, Tanged Firmer, Assorted, 29c; large, 36c per doz.
Applewood Socket, Firmer, Assorted ..... per doz. 24c
*Coal Pick* ..... 50&10%
*Drifting Pick* ..... 50&10%
*File*, assorted 13c, large 16c per doz.
*Hammer.*
Adze Eye ..... per doz. 40c
Blacksmiths' ..... per doz. 40c@70c
Machinists' ..... " 45c@70c
*Hatchet* ..... per doz. 40c
*Hay and Manure Fork* ..... 30%
*Hoe and Rake* ..... 30%
*Hoe*
Plain ..... per doz. 75c
Varnished ..... " 80c
*Screw Driver.*
Assorted ..... " 37c
Large ..... " 48 c
*Shovel and Spade* ..... 33⅓%

HANGERS.

*Barn Door.*
Challenge ..... 60&10%
Peerless ..... 70&10%
Silver Star ..... 60&5%
Storm King ..... 60@5%
World's Best ..... 50%
Wagner's Adjustable ..... 70&10%
Warehouse ..... 60%
Griffin ..... 70&10%
*Conductor P*
Griffin ..... 70&10%
Iwan's Perfection ..... 50%
*Eave Trough.*
Baker's ..... per gro. $9 25
Imperial ..... 30%
Wire ..... 33⅓%
*Parlor Door.*
Acme ..... per set $3 75
Ives' Improved ..... " 2 50
Lane's Standard ..... " 3 50
" New Model ..... " 3 10
Le Roy Noiseless ..... " 4 00
Richards' ..... 40-10&5%

HASPS.

Hinge, Wrought ..... 40
With Staples—See Staples.

HATCHETS.

Crown ..... 50-10&5%
Cast Claw ..... per doz. $1 20@1 45
Cast Shingling .... " $0 95@1 20
Germantown ..... 40%
Plumbs ..... 33⅓&5%
Underhill's Star Lath ..... 40&10%

HAY KNIVES.

See Knives.

HAY RACK BRACKETS.

Wenzleman's No. 1 .... per doz. $ 9 00
" No. 2 .... " 9 00

HINGES.

*Blind.*
Clark's Gravity ... per doz. sets 25c
Parker's ..... 65%
Shepherd's Noiseless, for Wood casing ..... per doz. 1 25
*Gate.*
Clark's ..... 1 2 3
Hgs & Ltch .... doz. $2.50 3.00 4.00
Hinges only .... " 1.00 2.30
Latches only ... " .70 .75
Knuckle ..... per doz. prs. $6 00
Leed's ..... " sets 6 75
Superior ..... " prs. 9 50
*Spring.*
American ..... 30%
Chicago ..... 35&5%
Columbia Dbl. Acting .... 40&10&5%
Gem ..... 25%
Ideal Detachable .... per gro. $11.10
Matchless ..... 30%
New Idea ..... per gro. $6.40
Oxford ..... 30%
*Wrought Iron.*
New Lists .....
*Griffin.*
Light Strap Hinges ..... 60%
Heavy Strap Hinges ..... 65%
Light T Hinges ..... 55%
Heavy T Hinges ..... 45%
Extra Heavy T Hinges ..... 60%
Cor. Heavy Strap ..... 70%
Cor. Ex. Heavy T ..... 65&10%
*Screw Hook and Strap.*
6 to 12 in ..... per 100 lbs. $2 75
14 to 20 in ..... " " 3 25
22 to 36 in ..... " " 3 40
*Screw Hook and Eye.*
⅝ in ..... per 100 lbs $6 75
½ in ..... " " 7 75
⅜ in ..... " " 9 75

HOES.

Garden ..... 70&10%
*Grub.*
Extra ..... 70%
Hazel ..... per doz. $5 00
Ladies' and Boys' ..... 75%
Mortar ..... 75&10%
Planter's Eye ..... 62½%
Weed ..... 75&15%

HOLLOW WARE—See Ware

HOOKS.

*And Eyes.*
Brass ..... 50&10%
Iron ..... 65&10%
*Awning* ..... per gro. $1
*Belt.*
Brown s ..... 70&5
Jones' ..... 65&5
*Bench.*
See Stops, Bench.

*Dex.*
Inch..... 6 8 10 12
Per doz.....$1.35 1.65 1.75 2.3
Humason & Beckley's, per doz. 2 5
(See Goods, Bright Wire.)

*Bush.*
Common Axe Handle, per doz. $7 0

*Chain.*
Inch... 1/4 5/16 3/8 7/16 1/2
Per 100 $7.60 9.10 9.75 11.50 12 6

*Clothes Line.*
Japanned.....per doz. 22c@24
Galvanized..... " 40c

*Coat and Hat.*
Cast Iron .....per gro. 75c@$1 5
Gem Wire.....70%

*Conductor.*
Malleable.....50&10%@50&10&5%
Wrought .....40&10%@50%

*Corn.*
Common, unpolished, per doz. $1 25
" polished.... " 1 80
"Cut Easy"..... " 2 75

*Cat.*
See Goods, Bright Wire.

*Grass.*
Common. Nos..... 2 3 1
Per doz.....$1.50 1.60 1.70
German.....per doz. 1 75
Little Giant..... " 2 75

*Hammock.*
With Plate.....per doz. 50c
With Screw..... " 45c

*Lambrequin*, or Drapery, per gro. 31c

*Picture* .....50%@50&10%

*Potato and Manure*.....70&12½%

*Screw.*
Brass.....80&5%
(See Goods, Bright Wire.)

*Seat Spring*.....per lb. 5½c

HOOPS, TUB.

Elastic.....per case of 2 doz. $1.50

HOSE, GARDEN.

| | | | | | Coupled per ft. |
|---|---|---|---|---|---|
| Heron-3ply-¾" guar. press. | | | | 55 lbs. | 7½c |
| Crane " " " | | | 75 | " | 8½c |
| Falcon " " " | | | 95 | " | 9½c |
| Eagle " " " | | | 120 | " | 10½c |
| Condor " " " | | | 150 | " | 11½c |
| High Test " " " | | | 200 | " | 12½c |

COTTON COV. RUBBER HOSE

| | | | | | |
|---|---|---|---|---|---|
| High Grade-¾"-guar. press. | | | 400 | lbs. | 11½c |
| Special " " " | | | 300 | " | 9½c |
| Leader " " | | | 100 | " | 7½c |

HUSKERS.

*Boss.*
Nos..... B BB E 200
Per doz.... $2.00 2.00 1.75 .80
Nos..... L PP P K
Per gro..... $5.40 6.00 6.00 10.50
Nos..... 2000 3000 O
Per gro..... $3.50 9.00 24.50
Nos..... 60 59 64 68
Per doz.....$2.15 2.15 .85 1.45

*Brinkerhoff's.*
Per gro.....$14 40

*Clark's*
Nos..... 1 63 200 400
Per doz.....$1.40 .75 .75 1.75
Nos..... 200s 40s 2s 4s
Per doz.....$0.85 1.50 1.25 1.25
Nos.....A AB F
Per doz.....$3.00 $4.25 $2.50

IRON.

See Metals—First column.

IRONS.

*Curling.*
X.....per doz. $0 40
Y..... " 50
Z..... " 58
Jewel..... " 85
Imperial ..... " 1 00
*Finking* ..... " 70

*Plane.*
Wood Bench.....20&5%

*Sad.*
Charcoal .....per doz. $11 00
Common, Polished, per 100 lb. 4 50
" Nickel plated, " 5 25
Chinese Polishing.....per doz. 7 40
Laundry. No. 1 ..... " 5 75
" No. 2 ..... " 6 25
Mrs. Pott's,
No. 50 J, Enterprise...per set 83c
No. 55 J, " ... " 83c
No. 50 T, " ... " 91c
No. 55 T, " ... " 88c
No. 50, Howells..... " 80c
No. 55, " ..... " 90c
Tailors' Sad.....per lb. 5½c
" Geese ..... " 5½c

*Tuyere.*
Single Duck Nest.....per doz. $5 25
Double " " ..... " 6 25
Sutton .....each 2 60

JACKS.

*Locomotive*..... 70%

*Wagon.*
Oliver
Nos ..... 0 00
Each.....$0.60 $0.75

Standard.
Nos..... 1
Each.....$0.60 1.00
Wilcox.
Nos..... 1 2 3
Each.....$0.85 1.20 2.90

KETTLES.

Brass.....15%
Cauldron .....40&5%
Copper.....per lb. 27c
Muslin .....65%
Sugar .....50%

KNIVES.

*Boot Topping.*
Clyde, 9-in. Scimiter Blade, dz. $3 85
California.....3 40

*Cooper's Hoop*.....15%

*Corn.*
Clipper.....per doz. $1 75
Disston's..... " 2 75
Earle's..... " 3 00
Woodford..... " 2 25

*Drawing.*
Standard .....70%
Adjustable.....15%
Barton's Carpenters'.....10%
Folding Handle.....25&5%

*Hay.*
American, Sickle Edge..doz $10 50
Canton, Sickle Edge..... " 8 25
Heath's ..... " 8 00
Iwan's Sickle Edge..... " 9 50
Iwan's Impv'd Serrated.. " 10 00
Lightn'g, Holt's Genuine " 8 50
Lightning Pattern..... " 6 00
Wadsworth's Sp'r Point " 8 50

*Hedge.*
Challenge ..... ....per doz. $6 00
Disston's..... " 2 75

*Mincing.*
Common, Single ..... 40
" Double ..... " 50
Streeter, 4 Blade..... " 1 20
" 6 Blade..... 2 00

*Putty.*
Common..... " 60@1 00
Lander's..... per doz. $1 40@1 75

*Scraping.*
Beech Handle.....75@1 00
Lander's.....$ 25@3 00

KNOBS.

*Door.*
Mineral .....per doz. $0 73
Porcelain ..... " 83
Jet..... " 83

LADDERS.

*Common Long.*
Per ft .....9c@14c

*Extension.*
Per ft .....12c

*Step.*
Common, per ft.....6½c
" with Shelf, add 10c.
Keystone.... ..... .....15c
Triumph, per ft ..... .....20c

LANTERNS.

*Bull's Eye Police.*
3-in. Flash Light.....per doz. $6 00
2½-in. Regular..... " 4 00
3-in. Regular..... " 5 00

*Tubular.*
Buhl.....net prices

LEADERS, CATTLE.

Nos ..... 1 2 3
Per doz.....$0 55 $0 70 $2 75

LEATHER, LACE.

*Cut*.....22½%

*Sizes.*
Ex. Quality.....per sq. ft. 27c

LEATHERS, PUMP.

Valve and Plunger .....10%

LIFTERS.

*Stove Cover.*
Coppered.....per gro. 1 75@5 65
Ideal..... " 5 50
Alaska, Coppered " " 4 00
" Nickeled. " 5 00

*Transom.*
Payson's.....80%

LINES.

*Chalk.*
Twisted in 20-ft. hanks.
Nos..... 4 6 7 8 9
Per gross $1 50 2 00 2 25 2 50 3 00
Twisted in 50-ft. balls.
Nos..... 1 2 3 4
Per doz.....25c 30c 35c 41c
Braided in 20-ft. hanks.
Nos..... 0 1 2 3
Per doz.....22c 25c 31c 35c
Masons in 100-ft. hanks..doz.. 80c

*Clothes.*
60-ft. Jute.....per doz. $0 95
72-ft. " ..... " 1 15
60-ft. Sisal ..... " 1 40
72-ft. " ..... " 2 15
60-ft. Cotton ..... " 1 15
50-ft. Braided Cotton. " 95

LINING, STOVE.

In Bricks.....per crate 42c

MACHINES.

| *Boring.* | Without Augers | With Augers |
|---|---|---|
| Angular.....per doz. | 3 00 | 4 40 |
| Upright.... " | 2 60 | 4 00 |

*Leather Riveting.*
Chicago, Pomeroy....per doz. $9 00
Excelsior ..... " 2 00
Handy ..... " 2 00
Little Giant..... " 2 00
Pony, Pomeroy..... " 7 20

*Washing*
Winner..... .....per doz. 54 00
Keystone ..... " 54 00
U. S. Steel..... " 60 00
Advance, f.o.b. Chic'go " 24 50

MAIL BOXES.

See Boxes.

MALLETS.

*Carpenters'.*
Fibre Head, Small ...per doz. $5 00
" " Medium. " 5 75
" " Large... " 7 00
Round Hickory..... " 1 75
" Lignumvitæ .. " 2 85
Square Hickory..... " 1 75
" Lignumvitæ.. " 3 40

*Tinners'.*
Applewood ..... " 1 70
Hickory..... " 75@1 15
Hickory Sheet Iron.. " 1 30

MATS.

*Door.*
National Rigid.....50, 10&5%
Acme Steel Flexible.....33⅓%

*Stove.*
No. 2. .....per gross. $3.25
No. 1. ..... " 3.50
No. 1 Asbestos Toasters, or wire-covered Stove Mats, with handle.....per doz. 1.10
No. 2 Asbestos Toasters, with ring.....per doz. .60

MATTOCKS.

Plumbs.....70%
Extra .....60%

MAULS.

| Iron. lbs. | 10 | 13 | 16 | 1 |
|---|---|---|---|---|
| Per doz. | $4.00 | 4.50 | 5.25 | 5.60 |

| Wood face, lbs. | 10 | 13 | 14 |
|---|---|---|---|
| Per doz | $5.00 | 5.50 | 6.00 |

*Wood Choppers'.*
Lake Super'r & Oregon Pat. 75&10%

MEASURES.

| | ¼ pk. | 1 pk. | bu |
|---|---|---|---|
| Galvanized, per dz. | $2.25 | $3.00 | $3.85 |
| Japanned... " | 1.75 | 2.45 | 3.15 |

MICA.

First Quality.....15%
Second Quality.....30%

MILLS, COFFEE.

Enterprise .....35%
Parker.....40 12½&2½%
Arcade .....40-12½&2½%

MITRE BOXES.

See boxes.

MOPS.

*Brix*.....per doz. $3 15

*Handled Cotton.*
Pounds..... ¾ 1 1¼ 2
Per dozen...$2.00 2.35 2.65 3.25

MOWERS, LAWN.

*Ball-Bearing.*
Inches..... 14 16 18 20
Each .....$6.25 6.75 7.25 8.00

*Cheap Grades.*
Inches..... 12 14 16 18
Each .....$2.25 2.25 2.35 2.50

*Clipper* .....50, 10&10%

*Yale.*
Inches..... 4 16 18 20
Each.....$3.50 3.75 4.00 4.35

*Philadelphia.*
All Styles Except A & E 60, 10&10%
Style A.....50&10%
Style E, High Wheel.....60, 10&10%
Drexels.....40%
All Day.....Net Pric

NAILS.

*Cut Steel*.....rates, $2 50

*Cut Iron*.....2 60

*Wire.*
Small Lots.....$2 35
Carload " ..... 2 25
Cement Coated..... 2 10

*Horse Shoe.*
Aussable .....55&5%
Capewell .....15%
Perfect .....55&5%
Putnam. .....20-5%
Star.....35&5%

Clover Leaf.....per lb. net, 10½c

*Picture.*
Brass Heads.....35%

*Brads*.....65%

*Furniture* .....30

NAIL PULLERS.

See Pullers.

NAIL SETS.

See Sets.

NETTING, POULTRY.

Galvanized before Weav'g. ..60&10%
" After Weaving ....60&5%
Cut Pieces.....65&5%

NIPPERS.

*End Cutting.*
Stubb's Pattern. Ins. 5½ 6
Per dozen ..... $4.00 $4.25

*End and Diagonal Cutting.*
Swedish Side.....75%
Utica Drop Forge & Tool Co...60%

*Hoof.*
Heller's .....40&10%
V. & B.....55-5%

NOZZLES.

*Hose.*
Genuine Gem.....per doz. $6 15
Magic..... " 2 50
Mystic..... " 2 90

NUTS, HOT PRESSED.

*Square Blank.*

| In. | ¼ | 5/16 | ⅜ | 7/16 | ½ | ⅝ |
|---|---|---|---|---|---|---|
| lb. | 9½c | 8c | 6½c | 5½c | 5½c | 5c | 4½c |

*Square Tapped.*

| In. | ¼ | 5/16 | ⅜ | 7/16 | ½ | ⅝ | ¾ |
|---|---|---|---|---|---|---|---|
| lb. | 12½c | 10½c | 8c | 7½c | 6½c | 6½c | 6c |

For 5 lb. boxes add ½c per lb. to above prices.

OILERS.

*Chase Pattern.*
Brass and Copper.....60%
Zinc..... .....60%

*Engineers'*
Cannon.....55%
Tin.....per doz. $2.00@$2.25

*Machine.*
Common .....per doz. $0 50
Copper Plated Steel.. " 85
Malleable Iron.....60, 10&5%
Jappaned.....55@75c

OPENERS.

*Box.*
Inches..... 10 12 14
Flat...per doz $2.85 3.60 4.15
Round " 2.10 2.25 2.75

*Can.*
Delmonico.....per doz. $1 30
Never Slip..... " 0 85

*rate.*
V. & B..... " 5 75

OUTFITS, COBBLING.

Combination.....per doz. $11 00
Economy..... " 4 65
Family..... " 9 75

PADLOCKS.

Standard Wrought .....70&5%
Champion .....50%
Eureka.....40, 10&5%
Yale .....50&5%

PAILS.

*Cream.*
14-qt., without Ga....per doz. $3 50
20-qt., " " .... " 3 00
20-qt., with Gauge.... " 3 50

*Sap.*
10-qt., Galvanized..per 100.. $13 00
12-qt. " " .. 14 50
14-qt. " " .. 16 25
16-qt. " " .. 17 75
10-qt., IC Tin..... " .. 10 25
12-qt " " .. 11 75
14-qt. " " .. 13 00
10-qt., IX Tin..... " .. 12 75
12-qt. " " .. 16 00
14-qt. " " .. 17 00

*Stock*
Galvd. qts. 14 16 18 200
Per doz.....$2.75 4.00 4.75 5.25

*Water.*
Galvanized, qts 10 12 14
Per doz .....$1.95 2.20 2.45

*Wood.*
Cable, 2-Hoop.....per doz. $1 70
" 3-Hoop..... " 1 90
Cedar, 3-Hoop..... " 2 25
Standard, 2-Hoop..... " 1 60
" 3-Hoop..... " 1 80

PANS.

*Dripping*.....60&5%

*Fry.*
Common.....75&10%
Acme .....70%

*Roasting.*
Paxton.
Nos..... 1 2 3 4
Per doz.. $4.75 $5.75 $6.50 $7.50
Neverburn.. 4.00 4.50 5.50 6.
Savory No. 200 .....per doz 8.

PAPER.

*Building.*
Plain .....per 100 lbs. $1 25
Tarred..... " 1 25
Tarred Felt..... " 1 65
No. 20, Red Rosin.....pr roll 40
No. 30, Red Rosin ..... " 55

*Sand and Emery.*
Star.....low list..50%
B. & A.....50%

*Wrapping*
Drab Floor.....per lb
Rag.....

### PARERS

*Apple.*
Bay State.....per doz. $13 00
Turntable ..... " 00
White Mountain .... " 4 75
Reading..... " 6 50

*Potato.*
Goodsell's Saratoga 10½ in. doz. 6 50
" " 5 in.. " 5 50

### PICKS.

Adze Eye Ore ..... ..70%
Drifting and Poll Picks..... 70%
Plumbs Railroad ..... 70%
Surface..... 70%

### PINCERS.

Carpenters', cast steel.

| In. | 6 | 8 | 10 | 12 |
|---|---|---|---|---|
| Per doz. | $1 80 | $2 40 | $2 80 | $3 50 |

Blacksmith's ..... 45%
Heller's ..... 40%

### PINS.

*Clothes.*
Common.....per box of 5 gro. $0 52
Hoyt's..... " " 31
U. S..... " " 70

*Picket.*
Fluted 15 in.....per doz. $0 70
" 21 in..... " 1 60
Spiral ..... 1 90

### PIPE.

*Conductor.*
Territory.
Eastern..... 70%
Central..... 65&10%
Southern..... 65%
Western..... 65%
Southwestern..... 50-25&2½%

*Lead.*
Full coils.....per ℔. 7½c
Cut " ..... " 7½c

*Stove.*

| Acme—In. | 5 | 6 | 7 |
|---|---|---|---|
| Smooth, per jt.. | 8½c | 9½c | 10½c |
| Planished " .. | 22 c | 23 c | 42c |
| Peerless—Smooth. | 7½c | 8 c | 9½c |
| Polished | 14½c | 15½c | 18c |
| Plan'hed | 28 c | 31 c | 35½c |

| Made-up—In. | 5 | 6 | 7 |
|---|---|---|---|
| Smooth ..... | 7½c | 8c | 9½c |

7 to 6 in. Smooth Tapers, pr jt..13c
6 in. Smooth T's..... " ..27c
7 to 6 in. Planished Tapers.....45c

*Yale Patent Lock Pipe—Stove.*

| | 5" | 5½&6" | 7" | 7 to 8" |
|---|---|---|---|---|
| Battle Ax Blue | —Cents— | | | |
| Smooth Steel. | 6 | 6½ | 7½ | 8 |
| Double Lock Peerless Blue Smooth Steel. | 6½ | 7½ | 8½ | 8½ |
| Can't Slip Blue Smooth Steel. | 6½ | 7½ | 8½ | 8½ |
| Duplex Polish'd Blue Smooth Steel..... | 8½ | 9½ | 10½ | 10½ |
| Yale Russia Fin | 15½ | 16½ | 17½ | 17½ |
| Plan'h'd Duplex | 30½ | 30½ | 37 | 38 |
| Galvano, Galvanized Iron.. | 15 | 16 | 17 | 17½ |

If wanted made up, add per joint for grooved, 1c; riveted, 1½c. Crating made-up pipe extra.

*Wrought Iron Gas Pipe*
¼-in., black.....discount, 60%
¼-in. ..... " 60,10&5%
⅜-in. to 6-in.. black... " 70%
7 " 12 " .. " 62½%
¼ galvanized " 42%
⅜ " " 50%
½ " 6 " " 57½%
7 " 12 " " 45%

### PLANES.

Sargent Iron Bench..... 60%
Stanley Iron Bench..... 35&5%

### PLANTERS.

*Corn.*
Monitor.....per doz..$7 75
Triumph..... " .. 6 00
Segment..... " .. 9 00

*Potato.*
Acme.....per doz..$6 25
Challenge..... " ..11 00
Pingree..... " .. 2 25
Eureka ..... " .. 6 25

### PLATES, TIN.

See Metals in Column 1.

### PLIERS.

| *Button's*—In. | 4½ | 6 | 8 | 10 |
|---|---|---|---|---|
| Per doz..... | $2.75 | $3.25 | $4.15 | $5.15 |

*Button's Pattern.*

| In. | 4½ | 6 | 8 | 10 |
|---|---|---|---|---|
| Per doz..... | $2.15 | $2.40 | $2.90 | $3.75 |

*Cutting.*
Bernard's..... 30%
Lodi..... 50%

*End and Diagonal Cutting.*
Swedish Side ..... 70%
Utica Drop Forge & Tool Co....50%

*Fencing.*
Farmers' Choice....per doz ..$8 00
Russell's..... " .. 8 25

*Flat and Round Nose.*
Bernard's..... 30%
German ..... 65%
Lodi..... 50%
Paragon..... 50%

| *Gas*—In. | 6 | 8 | 10 | 12" |
|---|---|---|---|---|
| Per doz... | $2.25 | $3.00 | $4.00 | $5.0 |

*Tinner's.*
Hollow..... ....40%
Solid..... each..5½c

### PLUMBS AND LEVELS.

Common.....60&10&10%
Cook's..... 40%
Davis' Iron..... 35%
Davis' Inclinometer..... 15%

### POINTS.

Drive Well Points.....75&5%

### POKERS—STOVE.

Wr't Steel, str't or bent, pr doz.$0.55
Wr't Steel, wood hand'l " " .80
Nickel pl'td, coil hdl's.. " " .65

### POKES—ANIMAL.

Cracker Jack, wr't steel, per doz.... .....$4.50

### POLISH.

*Metal.*
Pride of the Bar.....$1.60

Putz Cream.

| Pts. | 1-6 | ½ | 1 |
|---|---|---|---|
| Per doz..... | $0.80 | $1.10 | $1.65 |

| Pts | 1 | 2 | 8 |
|---|---|---|---|
| Per doz | $3 75 | $4.50 | $7.50 | $12.50 |

White Silk half pints, per doz.$3.00
White Silk, 6 oz. cans, per doz. 1.00
Wondershine

| Pts. | 1-6 | ½ | 1 | 2 |
|---|---|---|---|---|
| Per doz..... | $0.70 | $1.35 | $2.25 | $3.00 |

*George William Hoffman.*
U. S. Metal Polish Paste, 3 oz. boxes, per doz., 50c; pr. gro..$4.55
½-lb. boxes, per doz..... 1.20
1-lb. boxes, per doz..... 2.25
U. S. Liquid, 8 oz. cans, per doz., $1.25; per gro.....12.00
Barkeepers' Friend Metal Polish, per doz., $1.75; per gro..18.00

*Shoe.*
M. D. C.....per doz. 35c@50c
F. C. O..... " .....40c
T. M..... " 55c@$1.75
Imperial.....per gr.....$5.00

*Stove.*
Black Eagle, 1 ℔ cans. pr gr..$15.00
Black Silk—
5 ℔. pail.....$0 70
Paste, 5 oz. cans....per doz. 75
Paste, ½ lb. cans.... " 1 05
Liquid, ½ pint cans..per doz $1 00
Liquid, 6 oz. cans... " 75
Steel Range Gloss.... " 1 75
Blackene, 1 ℔ cans....pr gro. 13 00
Black Jack, ½ ℔ cans.. " 9 25
Dixon's Carb. of Iron.. " 5 75
Nickel Plate..... " 4 50

### POPPERS, CORN.

Round or Square, 1 qt. per dz, ..$ 95
Square, 1½ qt..... " 1 10
Square, 2 qt..... " 1 25
2 qt. Reversible..... " 1 60

### POTS, FIRE.

Berns.....each $3 85
Clayton & Lambert's, ea..$4 75@6 25
Gate City.....each 6 25
Gem.....each..$6 75@8 50

### POWDER.

See Ammunition.

### PRESSES, FRUIT AND JELLY.

Enterprise Manufacturing Co....25%
Menls .....per doz. $1 85

### PRIMERS.

See Ammunition.

### PRUNERS.

Disston's Pole.....per doz. $6 50
Henry's Improved..... " 75&10%
Water's Improved..... " 80%

### PULLERS.

*Cork.*
Daisy.....each $3 10
Phoenix..... " 1 40
Quick and Easy..... " 2 70

*Nail.*
Giant.....per doz..$10 50
Giant Pattern..... " .. 6 00
Jumbo ..... " .. 9 00
—Gian *Tackt*..... " .. 40

### PULLEYS.

*Awning*—Jap'd.....60%
*Clothes Line*.....50&10%
*Hay Fork.*
Iron Wheel, 5 in.....per doz. $1 75
Wood Wheel, 6 in.... " 1 75
Wood Wheel, 6 in., pass knot..... " 2 15
*Hot House*—Jap'd .....50&10%
*Screw*..... " .....60%
*Side* ..... " .....50&10%
*Sash.*
Commo.....per doz $0
" n Sense, 2 in .. "
Empir Pattern. 2 in.. "
Ideal..e..... "
..... "

### PUMPS

*Pitcher Spout.*

| Nos. | 1 | 2 | 3 | 4 |
|---|---|---|---|---|
| Each ..... | $1.10 | 1.23 | 1.40 | 1.85 |

*Spray.*
Blizzard.....per doz. $14 50
Cyclone, tin..... " 3 40
" copper ..... " 6 75
Daisy..... " 9 00
Little Giant.....each 2 25

### PUNCHES.

*Conductors'.*
No. 22.....per doz. $2 25
*Machine*.....per ℔. 19
*Saddlers'.*
Common.....per doz. 60c@70c
Good..... " 72c@84c

### PUTTY.

*In Bladders.*
Strictly pure.....per 100 ℔s. 2 25

### RAIL.

*Barn Door.*
Crescent T..... 4½c
Double Flange..... 2½c
Matchless, 1 in..... 3c
Matchless, 1½ in..... 3½c
Storm King..... 4c
World's Best ..... 7c

*Sliding Door.*
Painted steel.....per ft. 4½c
Bronzed wrought iron... " 8½c

### RAKES.

*Coal* or Wood.....per doz. $5.20
*Garden.*
Steel.....70&10%
Steel, bow.....70&10%
Malleable Iron, heavy.....70&5%
*Hay.*
Wood.....$1.50@$2 00
*Lawn*—Wood.
XXX .....per doz. 3 00
Automatic ..... " 5 25
Lawn Queen..... " 3 00
Jumbo, 36 teeth..... " 5 50

### RASPS—See Files.

### RAZORS.

Bo-ras-ic .....50%
Red Devil..... 50%
Tree Brand..... 50%

### REGISTERS.

List December 5, 1904.

Black and White Japanned.....66⅔%
Nickel Plated..... 66⅔%
Electroplated, Brass, Bronze or Copper..... 66⅔%

### RINGS

*Bull.*

| Copper..... | 2½ in | 3 in. |
|---|---|---|
| Per doz..... | $1.40 | $1.80 |

Rea's Impro'd Self Piercing

| copper, pr d'z. | 2.00 | |
|---|---|---|
| Steel per doz.. | .85 | .95 |
| Nickel Plated | 1.35 | ... |

*and Ringers*—Hog.
Blair's Rings.....per doz. $0 58
Blair's Rings..... " 75
Brown's Rings..... " 50
Brown's Ringers..... " 80
Champion Ringers... " 1 60
Hill's Ringers..... " 70
Hill's Ring, boxes..... " 47
Major Rings ..... " 60
Perfect Ringers..... " 95
Wolverine Rings..... " 1 40
Wolverine Ringers... 80
*Fruit Jar.*
White.....per ℔ 30c
*Key.*
Split, round.....per doz. 17c
Split, square..... " 22c
Ball, Round..... " 22c

### RIVETS.

*and Burrs.*
Copper Belt..... 30%
Coppered Iron .....60&10&5%
Tinners' .....60&10%
*Hame* .....per ℔. $0 10
*Slotted Clinch*.....per doz. 40c@45c
*Tubular.*
Nos. 1 and 2 assorted sizes, doz. 45c

### RIVET SETS.

See Sets.

### ROPE.

*Cotton.*
¼, 5-16-in. Com. on reels..per ℔. 11½c
¼, 5-16-in. Com. in coils .. " 12c
¼, 5-16 Imperial in coils . " 21c
*Steel.*
1st quality..... 12 c
Hardware Grade, rates.per ℔. 10 c
*Pure Manila.*
1st quality..... " 15½c
Hardware Grade, rates. " 14½c

### RULES

Boxwood..... 60%
Ivory .....

### SASH WEIGHTS.

See Weights

### SAWS.

*Back.*
Disston's..... 35%
Jackson's..... 35%

*Butchers'.*
Disston's..... 30%

*Circular.*
Disston's..... 50%
Hiles'..... 50&10%

*Compass.*
Common.....per doz. $1.35@$1.60
Disston's..... 35%

*Cross-Cut.*
Disston's..... 45%

*Dehorning.*
Disston's..... " 5 75

*Hack.*
Disston's..... 35%
Keystone..... 30%

*Hand and Rip.*
Brown's ..... 30%
Disston's No. 7..... 30%
Disston's Nos. 8, D8, 12, 70, 112, D100, and 120 (new list) .... 35%
Keystone..... 30%
Enterprise, hand.....per doz.$5 00
Our Saw, hand..... " 4 50
Our Saw, rip..... " 4 50

*Keyhole*—Disston's..... 35%

*Kitchen.*
Sterling..... 35%
*One Man* ..... 30%

*Panel.*
Brown's..... 30%
Disston's No. 7..... 30%
Disston's No. D100..... 35%

*Pruning.*
Brown's..... 35%
Disston's..... 35%

*Wood.*
Common.....per doz. $4 50
Clover Leaf..... " 6 50

### SAW BUCKS—See Bucks.

### SAW SETS—See Sets.

### SAW TOOLS—See Tools.

### SAW FRAMES.

Common, plain.....per doz. $1 35
" painted.... " 1 70

### SCALES.

*Counter.*
Pelouze..... .....40&10%
*Platform.*
Osgood..... 50%

### SCOOPS.

*Grain.*
½ Bu. "Hercules,"..per doz. $13 70
1 " " " 15 00

### SCRAPERS.

*Box.*
Triangular..... 4 00
*Cabinet.*
Cast Steel..... " 60c@75c

*Road.*

| Cubic ft. | 7 | 5 | 3 |
|---|---|---|---|
| Without runners, ea. | $4.00 | 3.75 | 2.50 |
| With runners.... " | 4.25 | 4.00 | 3.75 |

### SCREWS.

*Bench.*

| Iron, in,..... | 1 | 1½ | 1½ |
|---|---|---|---|
| | $3.50 | $4.00 | $4.75 |

Wood, white maple..per doz. $3 50
*Hand*—Wood..... 10%
*Hand Rail*..... 30&10%
*Jack* .....70&10&5%
*Lag or Coach*—all sizes, gimlet pointed..... 75&5%

*Saw*—Centennial.

| Nos. | 1 | 2 | 3 | 4 | 5 | 6 |
|---|---|---|---|---|---|---|
| Per doz. | 18c | 20c | 26c | 30c | 23c | 25c |

*Wood.*
F. H. Bright..... 87½&5%
R. H. Blued..... 85%
F. H. Jap'd..... 82½%
F. H. Brass..... 85%
R. H. Brass..... 80%
R. H. Nickel Plated.....75-10%

### SCYTHES.

Clipper, grain.....per doz. $[illegible]
Clipper, grass..... " 6 27
Clover Leaf Dutchman "
Honest Dutchman..... 7[illegible]
BeVe B.....

### SHAVING SETS.
Smith & Hemenway...............60%

### SETS.
*Nail.*
Round, common......per doz. $0 33
Square, " ...... " 42
Octagon " ...... " 33
No. 5 Square,......... " 75
Cup Point, knurled pr. doz.........75
*Steel.*
Farmers'............per doz. $1 20
Tinners'....................50&10%
*Saw.*
Aiken's Pattern.....per doz. $3 60
Common Lever....... " 1 20
Disston's Monarch... " 6 50
" X Cut...... " 12 00
German ............ " 1 05
Morrill's Old Style... " 5 00
" Pattern.... " 3 25
Leach's........ " 80
Nash's Hand........ " 3 15
" X Cut........ " 4 20
Stillman's Lever..... " 1 20
" X Cut...... " 2 50

### SHARPENERS, SKATE.
Diamond.........per doz. $1 60
Smith & Hemenway.........20%

### SHAVES, SPOKE.
Iron..............per doz. $1.10@$1.85
Wood............ " 2.75@ 4.75
Bailey's.....................50&5%
Goodell's.....................15%

### SHEARS
*Pruning.*
Buckeye, No. 1.......per doz. $5 75
" No. 2....... " 7 40
California Pat.. 9 in.. " 3 20
" " 10 in.. " 4 00
Draw Cut, No. 3...... " 13 75
" " No. 4...... " 16 50
Henry's Pat. 0 01 14 012
Per doz......$1.40 $2.10 $2.06 $2.80
Star.................per doz. $4.00
*Sheep*—No. BBA.
Inches.......... 6 6½ 7
Reg. Grip...... $11.25 $11.50 $12.00
Nar. Grip, doz. 11.00 11.25 12.25
*Tinners'*—See Snips.

### SHEAVES, SLIDING DOOR.
*Common.*
Inches............ 3 4 5
Per set............ $0.34 $0.42 $0.70
*Hatfield's.*
Per set............ .75 1.00 1.60

SHELLS—See Ammunition.

### SHELLERS, CORN.
Union.................. per doz. $6.75

### SHIELDS.
Expansion Bolt Shields.......50&10%

### SHOES.
*Conductor* . .. ..............60&10%

SHOE POLISH—See Polish.
SHOT—See Ammunition.

### SHOVELS AND SPADES.
*Coal.*
No. 2 Woodford ......per doz. $5 50
No 182................ " 6 00
Ames' new list......Discount 12½%
Per Doz.
Neverbreak, hollow bck, blk. $15 75
National.... " " " 14 75
Buckeye .... " " " 10 00
Mohawk.... " " 9 00
*Drain.*
Iwan's Perfection..............60%
*Railroad, Etc.*
Black Diamond.......per doz $1 50
Crescent............... " 5 75
Keystone.............. " 8 75
Star.................. " 4 75
Vaterland............. " 9 50
Hollow Back.......... " 4 75
Ame's new list......Discount 12½%
*Snow.*
Per doz..................$1.65@$9.00
*Alaska Steel.*
D Handle.............per doz. $3 50
Long Handle....... " 3 00

### SINKS.
*Cast Iron.*
Painted.......................50&10%
Enameled, White...........50&10%
*Wrought Steel.*
Painted, new list..........40-10&5%

SLEDGES—See Hammers.

### SNAPS, HARNESS.
Champion.......................33⅓%
German Pattern................30&5%
Judd's Pattern....................50%

### SNATHS.
Double Ring, Bush.....per doz. $5 25
Patent Loop " .... " 4 75
" " Grass..... " 4 50

### SNIPS, TINNERS'.
Wiss..................................40%
National...........................40&10%

SOLDER—See Metals.

### SPRINGS, DOOR.
*Perfect.*
Nos........ 1 2 2½
Per doz....30c 35c 40 45c

*Reliance.*
Per doz.....light $1.25; heavy $2.50
*Star.*
Per doz...... light 90c; heavy $1.35
Torrey's..............per doz. $1.35
Warner's No......... 11 13
Per doz................ 75c $1.35

### SQUARES.
*Steel and Iron*......................70%
(Add for luing, $2.50 per doz., net)
*Mitre.*
*Try.*
*Try and Beve*
*Try and Miter.*
Fox's.................per doz. $5.75
Winterbottom's .................70%

### SQUEEZERS, LEMON.
Common Wood..........per doz $0 70
Porcelain Lined, Wood. " 1 25
Boss, malleable iron.... " 1 20
Iron Frame, p rc 'n bowl " 1 9·
" glass bowl... " 2 35
Little Giant, tin'd iron. " 4 00
Drum, japanned......... " 3 60
Drum, nickel plated.... " 4 50

### STAPLES.
*Blind.*
Barbed................per ℔ 9¼@9½c
*Butter Tub*............... " 8@8½
*Fence*—less than carload.
Polished.............per 100 ℔ $2 30
Galvanized .......... " 2 60
*Netting.*
Galvanized...........per 100 ℔ 4 00
*Wrought.*
Wrought Staples, Hasps and Staples, Hasps, Hooks and Staples, and Hooks and Staples................80-10&10%
Extra heavy................75&10%

### STEELYARD.
Discount 25%.

### STONES.
*Axe.*
Hindostan.............per ℔ 5¼@7c
More Grit............. " 9½c
Washita................ " 17 c
*Emery*.................. 60%@60&5%
*Oil*—Mounted.
Arkansas Hard......per doz. $23 00
Arkansas Soft....... " 15 50
Hindostan .............per ℔ 6¼@6½
*Oil*—Unmounted.
Arkansas Hard..........per ℔ $2 05
Arkansas Soft.......... " 1 10
Lilly White............ " 45
Queer Creek........... " 15
Ouachita............... " 28
Washita ................ " 26
*Sythe.*
Black Diamond.......per gro. $8 00
Crescent.............. " 4 25
Gem Corundum...... " 7 50
Green Mountain...... " 4 50
La Moille............. " 7 00
Quinnebog............ " 5 00
Red End.............. " 3 75

### STOPS, BENCH.
Hotchkiss'...... .......per doz. $3 50
Stearns'................ " 4 75

### STOPPERS, FLUE.
Common...............per doz. $0 40
Crown................. " 45
Gem, flat, painted...... " 85
Gem, cor'd, decorated.. " 70
Kirch's................. " 90
Perfect................. " 70@85
Skinner's Common Sense " 80

STOVE PIPE—See Pipe.
STOVE BOARDS—See Boards.
STOVE POLISH—See Polish.

### STRAPS.
*Scoop*...............per doz. prs. $1 85
*Skate*.............. " " 60@70c

### STRETCHERS.
*Carpet.*
Bullard's..............per doz. $3 90
Exelsior .............. " 5 25
Malleable Iron....... " 70
Perfection........... " 6 30
King................. " 4 50
*Wire.*
N. S. Elwood's....... " 6 00
O. S. Elwood's........ " 6 00
Little Giant.......... " 5 75
Safety ............... " 10 00
Star Lever........... " 6 25
Canton Tackle Block. " 9 50
Warner's ............ " 6 25

### SWIVELS.
Malleable Iron..............per ℔ 07
Wrought Steel.........per gro. $4 50

### TACKS.
American Cut..................90&15%
American Wire.................85&20%
Bill Posters Cut...............90&20%
Blued Carpet..................90&10%
Tinned Carpet.................90&10%
Gimp..............................90&10%
Upholsters' Cut ..............90&20%
Upholsters Wire..............90&10%
Double Pointed.................90%
Copper.........................per ℔ 32c
Canvas Nails...................75&5%
Clout Nails .................. .75&10%
Hungarian Nails.................80%

### TAPES, MEASURING.
Asses' Skin......................40&10%
Bend Leather......................20%
Patent Leather....................20%
Lufkin's Steel.....................25%
Lufkin's Metallic...................30%

TEE BEVELS—See Bevels.

### THERMOMETERS.
Tin Case...........per doz. 80c@$1 25
Wood Back........ " $2.00@12 00
Glass................ " 12 00

### TIES.
*Bale.*
Single Loop....................80&5%
other kinds......................70%
*Cow*—See "Chains."

### TOOLS, SAW.
Disston's Universal................40%
*Minature.*
Smith & Hemenway.............25%

### TRAPS.
*Fly.*
Balloon................per doz. $1 15
Harper's.............. " 1 25
*Game.*
Newhouse.......................40&10%
New Victor.....................70&10%
*Mole.*
Reddick's..............per doz. $6 00
*Mouse and Rat.*
Wood Choker...per doz. holes $0 12
Tin Choker..... " " 75
Delusion...............per doz. 1 15
Marty Rat.............. " 6 25
Marty Rat Imitation.. " 3 50
Marty Mouse.......... " 3 00
Marty Mouse Imitation " 2 00
Hold-em, wire rat.... " 3 75

### TROWELS.
*Brick.*
Clover Leaf.......................33⅓%
Brade's...........................15&5%
Disston's..........................20%
Rose's.............................25%
*Plasterers.*
Clover Leaf........................40%
Disston's..........................25%
W. & McP..........................25%

### TRUCKS.
Bag..........................each $2 75
Handy....................... " 1 85
Warehouse.......................50&10%
No............... 1 2 3
Half Ironed.... $3.00 $3.85 $5.50
Full Ironed.... 3.45 4.50 6.45

### TUBS, WASH.
*Standard, Wood* Ex.
Nos......... 3 2 1 large
Per doz....$5.00 $6.00 $7.00 $ 9.50
*Dowell.*
Per doz.... 5.35 6.35 7.00 9.50
*Cedar.*
Per doz.... 6.10 7.10 7.90 10 80
*Indurated.*
Per doz.... 8.55 9.45 10.80 13.50
*Galvanized.*
No ................ 2 3
Per doz.............$6.00 $6.75 $7.75

### TWINE.
Per ℔
3-ply Cotton Wrapping.............25c
4 " " " ...............25c
4 " " Extra Wrapping.......27c
4 " " " Hvy. Wrapping..25c
4 " " Wrapping on tubes...27c
3 " " " " cones...25c
4 " " " " " ...25c
India Hemp, ½-lb. balls..............19c
" " ¼-lb. " ..............18c
" " ¼-lb. " .......doz. 75c
2-ply Jute, ½-lb. " ..............14c
3-ply " ½-lb. " ..............13c
Jute Wrapping, ½-lb. balls.........14c
Jute Wool, 1-℔. balls................9½c
*Seine*
Nos............... 9 12 15+
Soft........per ℔ 26½ 26 25
Med....... " 26½ 26 25
Hard .... " 27 26½ 26
Staging, ½-lb. ball, size 21.......25½c
" " " " 24.......26c
" " " " 27.......26c
Bagging " ................23c
3-ply "B" in hanks..................18c
4 " "B" " ..................18c
3 " "A" ..................27c
3 " Silver Finish, in hanks....37c
*Fodder or Lath*
130 strand ..........................6½c
0 20strand. ..........................7

### VISES.
Phoenix................................30%
Cheney's ...............................20%
Parker's Oval Slide......50, 10&2½%
Phoenix Oval Slide,
In. 2½ 3 3½ 4½
Ea. $1 25 $1 50 $1 85 $2 75
Parker's Parallel..............18&20%
Parker's Victor.....................15%
Parker's Combination..............75%
Solid Box......... ...... .......40&5%
Adam's Mechanics'..........each 2 50
Williamson Universal,............60%

### WARE.
*Stove Hollow Ware.*
Plain or Unground..........50&10%
Ground Ware..................40&10%
Enameled Ware.....................40%
*Country Hollow Ware*, per 100 lbs $3.00
*White Enameled Ware.*
Maslin Kettles ..................65&5%
*Covered Ware*, Tin'd and Turn'd 35-10%
Enameled......45&10%
*Glue Pots*, Tinned...................30%
Enameled.................35%
*Enameled.*
Cherry Blossom and Chrysolite.50%

WASH BOARDS—See Boards.

### WASHERS.
Standard O. G. cast iron...per ℔. 2½c
Wrought iron in bulk per ℔.:
In. ¼ ⅜ ½ ⅝ ¾ ⅞ 1
9c 6½c 5c 4½c 4½c 4½c 3½c
Wrought steel in 5 ℔. boxes, per ℔.
In. ¼ ⅜ ½ ⅝ ¾ ⅞ 1
10c 7c 6c 5½c 5c 5c 4½c

WASHING MACHINES—See Machines.

### WEDGES.
*Ax*..........................per doz....[illegible]
*Galling* ......................per ℔ 10½
*Saw* ........................ " 8½

### WEANERS.
*Calf.*
Fuller's, per doz......$3 00 to $9 00
Tyler's Safety, per doz 1 85 to 2 40
Carroll's, per doz...... 3 00 to 3 75
Standard, per doz..... 3 00
Hoosier, per doz...... 3 50 to 4 00

### WEIGHTS.
*Hitching* .... ..............per ℔ 3½c
*Sash*—F.O.B. Chicago...pr ton $27 50

### WHEEL BARROWS.
Common Railroad....per doz..$15 50
Heavy " .... " .. 20 00
Panama Steel Tray " .. 35 00
Klondike " " .. 22 50
No. C4 Tubular " 43 Bryan..each 4 00
No. C5 " " 45 " " 5 25

### WHEELS.
*Corundum* ..................70&10&5%
*Emery*..............................75&5%
*Well* In. 8 10 12 14
Per doz.....$2.10 $2.50 $3.15 $5.00

### WIRE.
*Barbed* Painted. Galv'd.
Carloads..per 100 lbs..$2.60 $2.90
Less than car " .. 2.65 2.95
*Brass.*
In coils..............................20%
In 1 ℔ spools, new list..........50%
*Broom*—Tinned........60&10&10&10%
*Cable*—Same price as Barbed Wire.
*Copper.*
In coils....................20&10% 33⅓%
1 ℔ spools, new list ..... 50&10%
*Fence*—Smooth.
Nos. 6 to 9, An'eal'd, pr 100 lbs. $2.30
Nos. 6 to 9, Galvl'd... " 2.60
*Hair*—New list......................50%
*Market.*
Bright, full bdles..............70&5%
Bright, broken bdles ............70%
Coppered, full bdles............70%
Coppered, broken bdles.....65&10%
Tinned, full bdles..............70&5%
Tinned, broken bdles.........65&10%
*Picture*—In coils........80%@80&10%
In 5 ℔. spools. ..........per ℔..20c
*Plain*—Small lots................$2.10
Car lots ............................2.05
Small spools 5c per hundred higher.

### WRENCHES.
Acme Standard......................60%
Alligator No. 1..................85c net
Always Ready........................50%
Coe's Standard..................40&10&5%
Agricultural........................70&10%
Ellis Adjustable......................25%
Malleable "S"................per ℔. 06c
Malleable.......................... " 06c
Stillson Pipe..........................70%
Trimo " ......................65&10%

### WRINGERS.
No. 22, Guarantee....per doz. $32 5
No. 110, Guarantee.... " 32 5
No. 110, Brighton..... " 33 50
No. 110, Bicycle ...... " 31 50
No. 500, Royal ....... " 32 50
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Peters Cartridge Co., Cincinnati, O

**Boilers—Steam**

Boynton Furnace Co., Chicago, Ill
Kellogg-Mackay-Cameron Co., Chicago
Smith, Chas., Co., Chicago, Ill

**Bolts**

Columbus Bolt Wks., Columbus, O
Star Expansion Bolt Co. New York, N.Y

**Boxes—Hardware**

Green, A. H., New York

**Brass and Copper**

Hungerford, U. T., Brass & Copper Co. New York, N. Y
Plume & Atwood Mfg. Co., Chicago, Ill

**Cans**

Peoria Can Co., Peoria, Ill

**Carpenter Benches**

Grand Rapids Hand Screw Co., Grand Rapids, Mich

**Carpenters' Tools**

Davis & Cook, Watertown, N. Y
Duby & Shinn Mfg. Co., Branchport Station, Long Branch, N.J
Griffin Mfg. Co., Erie, Pa
North Bros. Mfg. Co., Philadelphia, Pa

**Carriage Forgings**

Columbus Bolt Works, Columbus, O

**Ceilings**

Berger Mfg. Co., Canton, O
Burton, W. J. Co., Detroit, Mich
Canton Art Metal Co., Canton, O
Canton Mfg. Co., Canton, O
Eller Mfg. Co., Canton, O
Friedley-Voshardt Co., Chicago, Ill
Keighley Met. Ceiling Co. Pittsburg, Pa
Milwaukee Art. Met. Ceil. Co., Milwaukee, Wis
St. Paul Roofing, Cornice & Ornament Co., St. Paul, Minn
Wheeling Corrugat'g Co., Wheeling, W.Va

**Cement—Plumbers**

Obermayer Co., S., Cincinnati, O

**Cement—Roofing**

Conners, Wm. Paint Mfg. Co. Troy, N.Y

**Chains**

Bridgeport Chain Co., Bridgeport, Conn

**Chains—Jack and Safety**

Hungerford, U. T. Brass & Copper Co., New York

**Chimney Tops**

Holland Furnace Co., Holland, Mich
Iwan Bros., Streator, Ill

**Clips—Carriage Trimmer's**

U. S. Clothes Pin Co., Montpelier, Vt

**Clothes Dryers**

Hill Dryer Co., Worcester, Mass
Mannen & Esterly, Cleveland, O
Martcross Co., Chicago

**Clothes Pins**

U. S. Clothes Pin Co., Montpelier, Vt

**Coil Springs**

Pullman Mfg. Co., Rochester, N.Y

**Commode Pails**

Pierce & Laux. Burlington, Iowa

**Conductor Hangers**

Berger Bros. Co., Philadelphia, Pa
Ross, A. J., Cambridge, Ill

**Conductor Pipe**

Berger Mfg. Co., Canton, O
Canton Mfg. Co., Canton, O
Clark, Quien & Morse, Peoria, Ill
Eller Mfg. Co., Canton, O
Friedley & Voshardt, Chicago, Ill
La Crosse Steel Roof. Co., La Crosse, Wis
Reeves Mfg. Co., Canal Dover, O
Schoedinger, F. O., Columbus, Ohio
St. Paul Roofing, Cornice & Ornament Co., St. Paul, Minn

**Cookers—Steam**

O-hi-o Cooker Co., Toledo, O
Toledo Cooker Co., Toledo, O

**Copper and Brass**

Hungerford, U. T., Brass & Copper Co., New York, N. Y
Plume & Atwood Mfg. Co., Chicago, Ill

**Corn Cribs**

Denning Wire & Fence Co., Cedar Rapids, Ia

**Cornices**

Berger Mfg. Co., Canton, O
Canton Mfg. Co., Canton, O
Eller Mfg. Co., Canton, O
Schoedinger, F. O., Columbus, O
St. Paul Roofing, Cornice & Ornament Co., St. Paul, Minn

**Cornice Brakes**

Bertsch & Co., Cambridge City, Ind
Niagara Machine & Tool Wks., Buffalo, N.Y

**Cut Offs—Rain Water**

Cooney & Geiger, Indianapolis, Ind
La Crosse Steel Roof. Co., La Crosse, Wis
Milwaukee Art. Met. Ceil. Co., Milwaukee, Wis

**Cutlery**

Simmons Hdw. Co., St. Louis, Mo

**Dampers**

Sayre Stamping Co., Sayre, Pa

**Eaves Trough**

Canton Mfg. Co., Canton, O
Eller Mfg. Co., Canton, O
Iwan Bros., Streator, Ill
La Crosse Steel Roof. Co., La Crosse, Wis
Milwaukee Art. Met. Ceil. Co., Milwaukee, Wis.
Schoedinger, F. O., Columbus, O
St. Paul Roofing, Cornice & Ornament Co., St. Paul, Minn
Whitacre, J. E. Mfg Co., Rockford Ill
Wheeling Corrugating Co., Wheeling, W. Va

**Elbows—Conductor Pipe**

Canton Mfg. Co., Canton, O
Dieckmann, F., Cincinnati, O
Diener Mfg. Co., Geo. W., Chicago
Milwaukee Art. Met. Ceil. Co., Milwaukee, Wis.
Eller Mfg. Co., Canton, O
Reeves Mfg. Co., Canal Dover, O
Wheeling Corrugating Co., Wheeling, W. Va

**Elbows—Stove Pipe**

Diener, Geo. W. Mfg. Co., Chicago
Reeves Mfg. Co., Canal Dover, O

**Electro Plating Outfits**

Hanson & Van Winkle Co., Chicago, Ill

**Elevators**

Kimball Bros. Co., Council Bluffs, Ia

**Enameled Ware**

Lisk Mfg. Co., Canandaigua, N. Y
Star Enameling and Stamping Co., Pittsburgh, Pa

**Fencing—Wire**

Denning Wire & Fence Co., Cedar Rapids, Ia
Pittsburgh Steel Co., Pittsburgh, Pa

**Files**

Carver File Wks., Philadelphia, Pa
Disston Henry & Sons, Philadelphia, Pa

**Firearms**

Stevens, J. Arms & Tool Co., Chicopee Falls, Mass

**Firearms—Accessories**

Stevens, J. Arms and Tool Co., Chicopee Falls, Mass

**Forming Rolls**

Bertsch & Co., Cambridge City, Ind
Niagara Mch. & Tool Wks., Buffalo, N.Y

**Foundry Supplies**

Obermayer, S. Co., Cincinnati, O
Stevens, F. B., Detroit, Mich

**Furnaces—Gas**

Blickelhaupt Skylight Works, New York
Mannen & Esterly Co., Cleveland, O

**Furnaces—Hot Air**

Beckwith, Estate, P. D. Dowagiac, Mich
Boynton Furn. Co., Chicago, Ill
Cox, Abram, Stove Co., Philadelphia, Pa
Green Fdy. & Furn. Wks., Des Moines, Ia
Haynes-Langenberg Mfg Co., St. Louis, Mo
Henry & Scheible Co., Cleveland, O
Hess, Snyder Co., Massillon, O
Holland Furnace Co., Holland, Mich
Kelsey Heating Co., Syracuse, N. Y
Lennox Furnace Co., Marshalltown, Ia
Mannen & Esterly Co., Cleveland, O
May & Fiebeger Akron, O
Meyer Furnace Co., Peoria, Ill
Monroe Fdy. & Furn. Co., Monroe, Mich
Mueller, L. J. Furn. Co., Milwaukee, Wis
Rait, Walter S. & Co., Chicago, Ill
Robinson Furnace Co., Chicago, Ill
Schwab, B. J. & Sons Co., Milwaukee, Wis
Smith, Chas. Co., Chicago, Ill
Stanton Heater Co., Martin's Ferry, O
Stove & Range Co. of Pittsburgh, Pittsburgh, Pa
Youngstown Furn. & Supply Co., Youngstown, O

**Furnaces—Tinners'**

Bickelhaupt Skylight Works New York
Burgess Soldering Furnace Co., Columbus, O
Clayton & Lambert Mfg. Co., Detroit, Mich
Turner Brass Works, Chicago, Ill
Yost Mfg. Co., G. W., Mechanicsburg, Pa

**Furnace Pipe and Fittings**

Green Fdy. & Furn. Wks., Des Moines, Ia
Mueller, L. J. Furn. Co., Milwaukee, Wis
Perfection Furnace Pipe Co., Toledo, O
Robinson Furnace Co., Chicago, Ill
Smith, Charles Co., Chicago, Ill

**Gas Lamps**

Manhattan Screw & Stpg. Co., New York, N. Y

**Generators—Low Voltage**

Hanson & Van Winkle Co., Newark, N.J

**Glass**

Powers & Williams, Streator, Ill

**Hand Screws**

Grand Rapids Hand Screw Co., Grand Rapids, Mich

**Hand Punching Machines**

American Lock Nut Co., Oregon, Ill

**Hangers—Door**

Safety Door Hanger Co., Ashland, O

**Hangers—Eaves Trough**

Schoedinger, F. O., Columbus, O

**Hangers—Garment**

Pullman Mfg. Co., Rochester, N.Y

**Hardware Jobbers**

Clark, Quinn & Morse, Peoria, Ill
Paxton & Gallagher Co., Omaha, Neb

**Hardware Specialties**

Arcade Mfg. Co., Freeport, Ill
Carver File Co., Philadelphia, Pa
Enterprise Mfg. Co. of Pa., Philadelphia, Pa
Peck-Hamre Mfg. Co., Berlin, Wis
Pullman Mfg. Co, Rochester, N. Y
Simmons Hdw. Co., St. Louis, Mo
Smith & Hemenway Co., New York, N. Y

**Heating**

Detroit Heating & Lighting Co., Detroit, Mich
Kellogg-Mackay-Cameron Co., Chicago, Ill
Kelsey Heating Co, Syracuse, New York
United States Reg. Co., Ltd., Battle Creek, Mich

**Hinges**

Griffin Mfg. Co., Erie, Pa

**Hollow Ware**

Avery Stamping Co., Cleveland, O
Sperry, D. R. & Co., Batavia, Ill

**Horse Nails**

Standard Horse Nail Co., New Brighton, Penna

**Ice Cream Freezers**

North Bros. Mfg Co., Philadelphia, Pa
Richmond Cedar Wks., Richmond, Va

**Kitchen Utensils**

Avery Stamping Co., Cleveland, O
Lisk Mfg. Co., Canandaigua, N. Y

**Ladders—Shelf**

Calander, John, St. Paul, Minn

**Lanterns**

Berger Mfg. Co., Canton, O

**Lawn Mowers**

Clipper Lawn Mower Co., Dixon, Ill

**Levels**

Baker-McMillen Co., Akron, O
Davis & Cook, Watertown, N. Y

**Lightning Rods**

Maher & Son Lightning Rod Co., Preston, Iowa
Security Lightning Rod Co., Burlington, Wis

**Mail Boxes**

Blick-Williams Co., Indianapolis, Ind
Hessler, H. E. Co., Syracuse, N. Y
Signal Mail Box Co. Joliet, Ill

**Metal—Perforated**

Harrington & King Perforating Co., Chicago, Ill

**Metal Polish**

Hoffman, Geo. W., Indianapolis, Ind

**Metal Shingles**

Burton, W. J. Co., Detroit, Mich
Cortright Metal Roofing Co., Philadelphia
Nat'l Sheet Metal Roofing Co., Jersey City, N. J
St. Paul Roofing, Cornice & Ornament Co., St. Paul, Minn

**Mills—Coffee**

Enterprise Mfg. Co. of Pa., Philadelphia, Pa

**Miters**

Whitacre, J. E. Mfg. Co., Rockford, Ill

**Mop Heads and Handles**

Eagle Cooperage Wks., Circleville, O

**Mop Wringers**

Eagle Cooperage Wks., Circleville, O

**Nails and Tacks—Copper**

Hungerford, U. T., Brass & Copper Co., New York, N. Y

**Nickel Plating Plants**

Hanson & Van Winkle Co., Chicago, Ill

**Nuts**

American Lock Nut Co., Oregon, Ill
Columbus Bolt Works, Columbus, O

**Paints and Paint Specialties**

Buckeye Paint & Varnish Co., Toledo, O
Connors, Wm., Paint Mfg. Co., St. Louis, Mo
Dixon, Jos. Crucible Co., Jersey City, N. J

**Patterns**

Gray, G. L., New York, N. Y
Probert School of Instruction, The E. R., Cincinnati, O

**Pencils**

Dixon, Jos. Crucible Co., Jersey City, N.J

**Perforated Metal**

Harrington & King Perforating Co., Chicago, Ill

**Photograph Clips**

U. S. Clothes Pin Co., Montpelier, Vt

**Pistols**

Stevens, J. Arms & Tool Co., Chicopee Falls, Mass

**Polish—Metal**

Hoffman, Geo. W., Indianapolis, Ind
Nickel Plate Stove Polish Co., Chicago, Ill

**Polish—Stove**

Black Silk Stove Polish Works, Sterling, Ill
Nickel Plate Stove Polish Co., Chicago, Ill

**Pumps**

Berger Mfg. Co., Canton, O
Hess-Snyder Co., Massillon, O

**Punches**

American Lock Nut Co., Oregon, Ill
Bertsch & Co., Cambridge City, Ind
Niagara Mch. & Tool Wks., Buffalo, N.Y

**Radiators**

Kellogg-Mackay-Cameron Co., Chicago, Ill

**Rasps**

Disston, Henry & Sons, Philadelphia, Pa
Carver File Wks., Philadelphia, Pa

**Razors**

Smith & Hemenway Co., New York, N.Y

**Registers**

Ferrosteel Co., The, Cleveland, O
Henry & Scheible Co., Cleveland, O
Mueller, L. J., Furn. Co., Milwaukee, Wis
Perfection Furnace Pipe Co., Toledo, O
Schwab & Sons Co., Milwaukee, Wis
Symonds Mfg. Co., E. St. Louis, Ill
United States Register Co., Ltd., Battle Creek, Mich

**Rifles**

Stevens, J. Arms & Tool Co., Chicopee Falls, Mass

**Rivets**

Columbus Bolt Works, Columbus, O
Hungerford, U. T., Brass & Copper Co., New York, N. Y

**Roasters**

Lisk Mfg. Co., Ltd., Canandaigua, N. Y

**Roofing—Asphalt**

Stowell Mfg. Co., Jersey City, N.J

**Roofing—Iron and Steel**

Berger Mfg. Co., Canton, O
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Canton Art Metal Co., Canton, O
Canton Mfg. Co., Canton, O
Eller Mfg. Co., Canton, O
Follansbee Bros. Co., Pittsburgh, Pa
Friedley & Voshardt, Chicago, Ill
Kanneberg Roofing & Ceiling Co., New York, N. Y
La Crosse Steel Roof. Co., La Crosse, Wis
Nat'l Sheet Metal Roof. Co., Jersey City, N. J
Reeves Mfg. Co., Canal Dover, O
Schoedinger, F. O., Columbus, O
St. Paul Roofing, Cornice & Ornament Co., St. Paul, Minn
Wheeling Corrugating Co., Wheeling, W. Va

**Roofing Cement**

Connors Paint Co., The Wm., Troy, N.Y
Taylor Co., N. & G., Philadelphia, Pa

**Roof Paint**

Dixon, Jos. Crucible Co., Jersey City, N.J

**Rules**

Lufkin Rule Co., Saginaw, Mich

**Sash Balances**

Pullman Mfg. Co., Rochester, N.Y

**Sausage Stuffers**

Enterprise Mfg. Co. of Pa., Philadelphia, Pa

**Saw Sets and Saws**

Disston, Henry & Sons, Philadelphia, Pa
Goodell-Pratt, Greenfield, Mass
Smith & Hemenway Co., New York, N.Y

**Screens—Perforated Metal**

Harrington & King Perforating Co., Chicago, Ill

**Screen Door Checks**

Pullman Mfg. Co., Rochester, N. Y

**Screws**

Columbus Bolt Works, Columbus, O

**Screw Drivers**

North Bros. Mfg. Co Philadelphia, Pa

**Scuttle Openers**

Bickelhaupt, G., Skylight Works, New York, N. Y

**Seamless Tubing—Brass & Copper**

Hungerford, U. T., Brass & Copper Co., New York, N. Y

**Shears**

Bertsch & Co., Cambridge City, Ind
Niagara Mch. & Tool Wks., Buffalo, N.Y
Simmons Hdw. Co., St. Louis, Mo
Wagner, C. DeWitt, Cedar Rapids, Ia
Weiss, H. & Co., New York, N.Y

**Sheets—Black and Galvanized**

Berger Mfg. Co., Canton, O
Taylor Co., N. & G., Philadelphia, Pa
Wheeling Corrugat'g Co., Wheeling, W. Va

**Sheet Metal Patterns**

Gray, G. L., New York, N. Y
Probert School of Instruction, Cincinnati, Ohio

**Sheets—Planished**

American Sheet & Tin Plate Co. Pittsburgh, Pa
Ward-Dickey Steel Co., Indiana Harbor, Ind

**Sheets—Steel**

American Sheet & Tin Plate Co., Pittsburgh, Pa
Taylor Co., N. & G., Philadelphia, Pa
Ward-Dickey Steel Co., Indiana Harbor, Ind

**Shot Guns**

Stevens J., Arms & Tool Co., Chicopee Falls, Mass

**Shovels**

Avery Stamping Co., Cleveland, O

**Siding**

Milwaukee Artistic Metal Ceiling Co., Milwaukee, Wis

**Skylights**

Eller Mfg. Co. Canton, O
Galesburg Cornice Wks., Galesburg, Ill
Schoedinger, F. O., Columbus, O
St. Paul Roofing, Cornice & Ornament Co., St. Paul, Minn

**Skylight Gearing**

Bickelhaupt, G., Skylight Works, New York, N. Y
Weiss, H. & Co., New York, N.Y

**Slate**

Auld & Conger Co., Cleveland, O

**Solder**

Taylor Co., N. & G., Philadelphia, Pa

**Squares, Machinists'**

Disston, Henry & Sons, Philadelphia, Pa
Duby & Shinn, Branchport Station, Long Branch, N. J

**Stampings—Sheet Metal**

Avery Stamping Co., Cleveland, O

**Stoves and Ranges**

Beckwith, P. D. Estate, Dowagiac, Mich
Comstock-Castle Co., Quincy, Ill
Culter & Proctor, Peoria, Ill
Reeves, S. V., Philadelphia, Pa
Stove & Range Co. of Pittsburgh, Pittsburgh, Pa.
Union Stove Works, New York, N.Y
Van, John, Range Co., Cincinnati, O
Willard, Wm. G., St. Louis, Mo

**Stove Cement**

Dixon, Jos. Crucible Co., Jersey City, N.J

**Stoves—Gas**

Stove & Range Co. of Pittsburgh Pittsburgh, Pa

**Stove Patterns**

Cleveland Castings Pattern Co., Cleveland, O
Cope Pattern, Geo. W. Wks., Detroit, Mich
Quincy Pattern Co., Quincy, Ill
Vedder Pattern Works, Troy, N Y
Weller Pattern Co., Quincy, Ill

**Stove Pipes**

Hemp & Co., St. Louis, Mo
Reeves Mfg. Co., Canal Dover, O

**Stove Pipe—Nested**

Reeves Mfg. Co., Canal Dover, O

**Stove Repairs**

Brauer, A. G., Supply Co., St. Louis, Mo
Reeves, S. V., Philadelphia, Pa

**Sugar Kettles**

Sperry, D. R. Co., Batavia, Ill

**Tanks**

St. Paul Roofing, Cornice & Ornament Co., St. Paul, Minn

**Tapes**

Lufkin Rule Co., Saginaw, Mich

**Technologist**

Hooper, C. N. Dubuque, Iowa

**Test Tube Holders**

U. S. Clothes Pin Co., Montpelier, Vt

**Thermometers—Oven**

Evans Stamping & Plating Co., Taunton, Mass

**Tin—Perforated**

Harrington & King Perforating Co., Chicago Ill

**Tin and Terne Plate**

Taylor Co., N. & G., Philadelphia, Pa

**Tools—Linemen's**

Smith & Hemenway, New York, N.Y

**Tinners' Tools**

Berger Bros. Co., Philadelphia, Pa
Lufkin Rule Co., Saginaw, Mich
Niagara Machine & Tool Works, Buffalo, N. Y
Smith & Hemenway Co., New York N.Y
Taylor Co., N. & G., Philadelphia, Pa

**Tinplate**

Canton Art Metal Co., Canton, O
Eller Mfg. Co. Canton, O
Follansbee Bros. Co., Pittsburgh, Pa
Merchant & Evans Co., Philadelphia, Pa
Schoedinger, F. O., Columbus, O
Taylor Co., N. & G., Philadelphia, Pa
Wheeling Corrugating Co., Wheeling, W. Va

**Tinware Trimmings**

Berger Bros. Co., Philadelphia, Pa

**Tools, Etc.**

North Bros. Mfg. Co., Philadelphia, Pa

**Trowels**

Avery Stamping Co., Cleveland, O
Disston, H. & Sons, Philadelphia, Pa
Griffin Mfg. Co., Erie, Pa

**Trucks—Stove**

Arcade Mfg. Co., Freeport, Ill

**Tubing—Brass and Copper**

Hungerford, U. T., Brass & Copper Co., New York, N.

**Ventilators**

Canton Mfg. Co., Canton,
Eller Mfg. Co., Canton, O
Friedley & Voshardt, Chicago Ill
Globe Ventilator Co., Troy, N.Y
Merchant & Evans Co., Philadelphia, Pa
Powers Bros. Streator, Ill
Pullman Mfg. Co., Rochester, N. Y
Schoedinger, F. O., Columbus, O

**Washers**

Columbus Bolt Works., Columbus, O

**Washing Machines**

Bramner, H. F., Mfg. Co., Davenport, Ia
Richmond Cedar Wks., Richmond, Va
Waverly Woodenware Works, St. Joseph, Mo
White Lily Mfg. Co., Davenport, Ia and Toledo, O

**Wire Goods**

Denning Wire & Fence Co., Cedar Rapids, Ia
Pittsburgh Steel Co., Pittsburgh, Pa

# Wants and Sales

**For Yearly subscribers THE AMERICAN ARTISAN will insert under this head advertisements of six lines WITHOUT CHARGE for employers wishing to secure employes, persons seeking situations, parties desiring to purchase a business, businesses for sale, partners wanted, to exchange, etc. Those who respond to these announcements will please mention that they read the advertisement in THE AMERICAN ARTISAN.**

## BUSINESS CHANCES.

## PATENTS

HUBERT E. PECK, 623 F. St., N. W. Washington, D. C. Consulting Expert in Patent Causes. U. S. and Foreign Patents. Send for leaflet on "Rejected Patent Application."

For Sale—Retail department of an old house in a southern city. Stoves, house-furnishings, crockery, hardwood, mantels. In same location on principal street since 1872. Address D 59, care of THE AMERICAN ARTISAN, 69 Dearborn St., Chicago. 21-3t

For Sale—Hardware and grocery stock at Whitefish, Montana. About $6,000. Can reduce to $4,000 if necessary. This is a division point on the Great Northern Railway. Apply to McIntosh Hardware Company, Kalispell, Mont. 21-3t

For Sale—Stock of hardware, tinners' tools, paints and oils. Doing good business in southern Wisconsin county seat of 2,000. One other hardware. Stock will invoice $4,300. Good rich country and business satisfactory. Address D 56, care of THE AMERICAN ARTISAN, 69 Dearborn St., Chicago. 21-3t

For Sale—New up-to-date hardware stock in a thriving town of 1,000 in southeast South Dakota. Will guarantee no dead stock. Invoice about $4,000. Large territory; fine location. 15 per cent discount. This is a genuine snap. Address Q. Stark, Hartford South Dakota. 21-3t

For Sale—We can interest you if you are looking for an up-to-date hardware stock in a live town of 1,000 in central Wisconsin. Stock invoices about $4,000. Two-story brick building, $3,500. Annual sales, $15,000. Good reason for selling. No trades. Address D 12, care of THE AMERICAN ARTISAN, 69 Dearborn St., Chicago, Ill. 20-2t

For Sale—A general stock of hardware, stoves and tinware. Tinshop in rear with set of tinners' tools. Splendid location. No competition. Rent cheap. Stock and fixtures will invoice $3,000. Will sell for $2,000 cash. Anxious to retire. Address F. A. Scheidt, Joliet, Ill. 19ufn

For Sale—A first-class stove and tin store with a good tin shop in connection. Well equipped with tools. Old reliable business stand. Selling on account of death of owner. Address, Mrs. M. L. Boyer, West Liberty, Ohio. Box 81. 16ufn

For Sale—Tin, cornice and furnace shop at a bargain in one of the best towns in the state of Colorado. An average business of $8,000 a year. A1 field for out of town. Reason for selling, altitude too high for family. Address D38, care THE AMERICAN ARTISAN, 69 Dearborn St., Chicago, Ill. 16ufn

For Sale—A clean and profitable hardware, heating and plumbing business, established in 1888. Will invoice about $7,000. Population 6,000. Sudden death of both members of firm reason for selling. Excellent opportunity. Address Box 147, Cedar Falls, Iowa.

For Sale—A clean and profitable hardware and furnace business. Established 1893. Population about 7,000. Best location in the city and one of the best arranged stores in the state. Will turn over contracts and will make it of interest to some one looking for a good business. Poor health is my reason for selling. Address, J. V. Hyder, York, Neb.

## TINNERS' TOOLS.

For Sale—A complete set of tinner's tools. Will sell cheap if taken at once. Address L. A. Kofron, Iowa City, Iowa. 20-ufn

For Sale—The following list of tinners' tools: Stowell's beading machine, with stand; 1 large burring machine, with stand; 1 crimping and beading machine, with stand; 1 wiring machine, with stand; 1 20 in. grooving machine; 1 21 in. bar folding machine; 1 large turning machine; 1 30 in. sheet iron folder; 1 30 in. stove pipe former; 1 8x30 bench plate; 1 square head stake, 3½x5½; 1 round head stake; 1 13 in. hatchet stake; 1 conductor stake 14x14; 1 needle case stake; 1 hollow mondrel stake; 1 20-gutter beader. These tools are in good shape. If you want a bargain, write. Webster-Cook & Co., Mitchell, S. Dak. 19-2t

## HELP WANTED.

Wanted—A good tinner and furnace man; one with some experience in pipe work and plumbing. Steady work the year around at good wages. Address Taylor and Siders, Bement, Ill. 23-3t

Wanted—One good all around tinner who can do both inside and outside work such as roofing, spouting and all general work that comes to a tin shop. A good man can have steady work at $3.00 per day of ten hours. Address C. H. Pfister, 415 Franklin St., Michigan City, Ind. 23-3t

Wanted—At once, experienced hardware clerk. One with some knowledge of bookkeeping. Address M. R. O'Neill, Wholesale and Retail Hardware, Fargo, North Dakota. 23-3t

Wanted—Galvanizer. A reliable and practical man who understands galvanizing tubs, pails, etc., and possesses executive ability. State fully your experience, age and salary wanted. Address D-61, care THE AMERICAN ARTISAN, 69 Dearborn St., Chicago. 23-2t

Wanted—First-class tinner. Man that can cut his own patterns. Eight hour day. Steady job. Address Barrett Hardware Company, Joliet, Ill. 22-3t

Wanted—Five first-class tin roofers. Wages $2.50 to $4.00 per day. Address Charles Skidd, Kenosha, Wis. 22-3t

Wanted—A good all around tinner and clerk. Steady job as long as wanted. Send references and wages wanted. Address D 58, care of THE AMERICAN ARTISAN, 69 Dearborn St., Chicago. 21-3t

Wanted—Traveling salesman for North Dakota; also one for Chicago suburban territory. Must be familiar with tinware and enameled ware and furnish first-class references. Address The Republic Metalware Company, successors to C. Sidney Shepard & Company, Chicago, Ill. 21-3t

Wanted—A good tinner who has some knowledge of plumbing; also to clerk in store in slack time. Address Charles Weydert, Bayou Sara, Louisiana. 21-3t

Wanted at Once—First-class tinner who can do plumbing. Good wages. Address Carl A. Johnson, Escanaba, Mich. 21-ufn

Wanted—An experienced hardware salesman who understands country shop work. German or Norwegian preferred. Steady work and good wages to the right man. Must give references. State wages wanted. No boozer need apply. Address Ad. Tanguay, Lock Box 304, Willow City, North Dakota. 21-3t

Wanted—Experienced furnace and boiler salesman with some trade, to sell leading line of goods in Illinois, Wisconsin and Iowa. State fully particulars as to experience, age and salary expected. Address D 51, care of THE AMERICAN ARTISAN, 69 Dearborn Street, Chicago. 20-2t

Wanted—A first class tinner and furnace man, who can do some plumbing. Don't want a boozer and none need apply. Steady job, work the year around without loss of time on my account. State wages wanted, and if married. Address P. O. Box L, Barry, Illinois. 20-3t

Wanted, Immediately—A good all around tinner for shop and outside jobs—one who is sober and willing to do the work just as it comes in the country. Single man preferred. Write at once to C. Scherer & Son, Naperville, Illinois. 20-3t

Wanted—A good all around clerk, tinner and plumber, at once. Good steady job in town of 1,000 people. Must be honest, sober and industrious. State wages and give references. German or Swede preferred. Address Thos. Rawlings, Wakefield, Nebraska. 20-3t

## SITUATIONS WANTED.

Situation Wanted—By young man who has just completed his apprenticeship as a country tinner. Age 21 years. Can do pipefitting, pump and wind mill work, roofing, spouting and all that comes to a country shop. Am no lead pipe man. State wages in first letter. Steady job the year around wanted. Illinois or Wisconsin preferred. Address D 60, care of THE AMERICAN ARTISAN, 69 Dearborn St., Chicago. 22-3t

Situation Wanted—By July 1st with a reliable hardware firm desiring a good steady man to take charge of their shop. Can do plumbing, furnace work, slating, pump and tin work, etc. Was in business twelve years and understand contracting and figuring from plans. Can furnish first-class references in every respect. Am 38 years of age; married, and want a steady job. Have been with my present employer three years. Address D 57, care of THE AMERICAN ARTISAN, 69 Dearborn St., Chicago. 21-3t

Situation Wanted—Young married man who understands plumbing, steam heat and gas fitting wants steady work in small town. Address A. J. Stephens, 7333 St. Lawrence Avenue, Chicago, Illinois. 20-ufn

## SPECIAL NOTICES.

## WANTED

Foreman for steel ceiling stamping department. Man who can get good results, arrange the handling of stock, and get a first-class output from five or six presses. Address "Stamping Dept.," care of

THE AMERICAN ARTISAN
69 Dearborn Street Chicago. 21-3t

## Agents Wanted

To sell our specialties in Enamel Ware, to Hardware and House-furnishing Goods Trade. Enamel Specialty Mfg. Co., Box 609, Pittsburg, Pa. 22-4t

## Agents Wanted

To sell Japanned Tinware on commission basis to Hardware and House-furnishing Goods trade, and to Scheme Trade. Iron City Tin & Japan Co., McKees Rocks. Pa. 22-4t

## FOR SALE

We invite correspondence with an experienced hardware man who would like to buy an established business in the best town in Northern Iowa. Will bear investigation. No traders or land deals. Prices are not cut to pieces and agencies for the best trade-mark lines in the country. Good reason for wishing to sell. This is a snap. Address "Snap," care of THE AMERICAN ARTISAN, 69 Dearborn St., Chicago. 22 1t.

## Special Notice

HAVE HAD CONSIDERABLE experience calling upon stove manufacturers and hardware jobbers. Can handle specialty to good advantage. Am desirous of making a change. Address "P. D. Q." care of THE AMERICAN ARTISAN, 69 Dearborn Street, Chicago. 8-ufn

## SPECIAL NOTICES.

### Special Notice

We want to get in touch with a good jobber or warehouse to distribute our stoves throughout the Northwest. Address with full details, "B-60" care of THE AMERICAN ARTISAN, 69 Dearborn St., Chicago. 16-ufn

### Foreman Wanted

To take charge of factory making tinware specialty; one accustomed to dies and presses. Good salary and desirable position for capable man. State experience. Address "Foreman," care THE AMERICAN ARTISAN, 69 Dearborn St., Chicago. 16-ufn

### WANTED

**I can pay the highest market prices F. O. B. your city, for all kinds of old metals, such as copper, brass, zinc, lead, babbitt, skinnings, etc. Drop a line and I will be glad to name my best prices.**
**H. KANDER, Bowling Green, Ohio.** 3-ufn

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Brother Sheet Metal Workers:—Send me your difficulty in a letter, plainly sealed, so I will know just what you want, and enclose a dollar, and I will send you full typewritten instructions, accompanied by drawings if I cannot make it perfectly plain without. No publicity, and no one to laugh at you. I have had more than 25 years experience and am an active sheet metal worker at present. If you are not perfectly satisfied tell me frankly, and I will return your money just as frankly. Address H. E. Osborne, 335 Center St., Salt Lake City, Utah. 19-2t

### Special Notice

INTEREST IN MANUFACTURING AND JOBBING SHEET METAL BUSINESS FOR SALE

On account of ill health wish to dispose of controlling interest in $60,000.00 Roofing and Sheet Metal business in thriving city, 200,000 people. Established 17 years and business increasing apidly. Address, "Ill Health," care of THE AMERICAN ARTISAN, 69 Dearborn St., CHICAGO. 21-ufn

### Scrap Bands Wanted

**We pay one cent a pound f. o. b. cars your city for the bands that come around sheet iron. Write us or send at once and bill. Must be ½ inch thick and without ragged edges.**

**THE PECK-HAMRE MFG. CO.**
**BERLIN, WISCONSIN**

### FREE

**Lesson in Sheet Metal Pattern Cutting.**

Write to-day—Address

**The E. R. Probert School of Instruction**
**Box 476, Cincinnati, Ohio**

### BLACK Silk STOVE POLISH is the NAME

To sell a stove you must create a desire to have. No selling argument is so forceful as the FINE, SILKY, GLOSSY, FINISH YOU GET BY USING

***BLACK SILK STOVE POLISH!***

**A Stove Polished with Black Silk Sells First**

Black Silk Stove Polish wil' give a Gorgeous Brilliancy to Any Stove. It is—

**"The Shine that Stays: The Polish that's Clean."**

It goes further, lasts longer, gives a black, silky, glossy shine that sells stoves. It is absolutely the only Stove Polish that

**Does Not Dry Out or Rust Through The Can!**

It is just as good when it has been on your shelf two years as when first bought. Age actually improves it. BLACK SILK STOVE POLISH is scientifically made. It is developed in the dark and requires six weeks to perfect it. Ordinary polishes are made in fifteen minutes. There is no waste by dusting off in using. It retains its glossy, black, silky shine under a heat four or five times greater than other polishes will stand. No offensive odor when applying or when fire is started. All you have to do with your

***SHOP WORN SAMPLE STOVES***

(if you use Black Silk), is to sprinkle them with cold water and rub down with hard polishing brush—that's all!

**SOLD IN FIVE POUND CANS—SIX CANS PER CASE.**
In Barrels and Domestic Packages. Liquid and Paste. One Quality. One Name.
The name and picture of Lewis D. Wynn on each and every package of GENUINE BLACK SILK.

**Buy From Your Jobber—Ask Him For Free Sample.**

**BLACK SILK STOVE POLISH WORKS,** Station A, at Sterling, Ill., U. S. A.
BRANCHES—23 Warren St., New York, N. Y.; 97 Blackstone St., Boston, Mass.; Adams Wharf, Oakland, Cal.

### Gray's School of Sheet Metal Pattern Drafting

COVERING CORNICE, HEATING AND VENTILATION WORK

You are enabled to study while you continue to earn. Two evenings' study each week, will fit any ambitious mechanic or advanced apprentice to lay out and develop anything in the sheet metal line.

This is the **MOST THOROUGH COURSE** to be had and **COSTS LESS THAN ANY OTHER.** Costing less than five cents a day for the (25) months' course. Payable monthly.

Send 4 cents postage for circular giving full information, also sample blue print drawing, to

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TOWN .....

STATE .....

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Prices Are Lowest. Prompt Shipment.

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**S. V. REEVES**

No. 50 N. 2nd St., Philadelphia

Manufacturer

TRADE V MARK

**The LEIBRANDT & McDOWELL STOVE CO.'S STOVES and REPAIRS**

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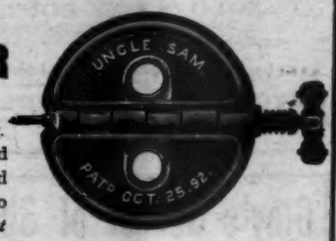
THE OLD RELIABLE

**UNCLE SAM DAMPER**

DURABLE, STRONG, LIGHT.

The plate is corrugated to prevent warping. Stamped from best nickeled steel. Sharply pointed steel stem, notched to engage edge of plate. Held in place by spring, and carefully fitted to loop to prevent turning. *Absolutely the best on the market*

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**THE RIGHT KIND**

of Oven Thermometer is

THE "Acme"

THE "Acme"

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Marble, Glass, Nickel, Brass, Copper, Tin and German Silver

can all be cleaned and polished with it easier than with anything else.

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Russia finish, pat. lock

**STOVE PIPE**

It is made of a very high grade of uniform color Blue Polished Steel, and is coated to prevent rusting. Made in all sizes.

Packed twenty-five and fifty joints to crate. For sale by the jobbing Hardware Trade throughout the United States.

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ST. LOUIS

In the event your jobber does not handle this pipe send your inquiries to us.

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**CLEVELAND CASTINGS PATTERN CO.**

Successors to
The GOBEILLE PATTERN COMPANY, Cleveland, Ohio
The LARGEST PATTERN WORKS in the World

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For Stoves and Heaters

First-class in wood and Iron

Vedder Pattern Works, Troy, N. Y.

Established 1835

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The GEO. W. COPE **Stove Pattern Works** Cor. Brush & Woodbridge Streets DETROIT MICHIGAN

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**WELLER PATTERN CO**

DESIGNS and ESTIMATES FURNISHED FOR ALL KINDS OF STOVE PATTERNS

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IRON & WOOD
STOVE PATTERNS
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**Any Manufacturer, Hardware Merchant or Artisan** in search of another location at some town where conditions would be "Right," should investigate the excellent opportunities existing in the Southwest, especially in the new STATE OF OKLAHOMA along the lines of the

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will give you clear and smooth face plates, and where ornamentations occur they will be well-defined.

**STEVENS' POLISHING and PLATING COMPOSITIONS**
will do the rest. Write for catalog H.

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**FACING MILLS:** Isabella Ave. & M. C. R. R.
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(TRADE MARK)

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A guaranteed silver plating compound that cleans and plates silver in one operation.

**NON-POISONOUS—INODOROUS—STAINLESS**

Reverses old method now in use by putting on silver instead of scouring it off.

Send for trial order through your jobber.

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Absolutely High Grade

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## Inverted Gas Lamp

**Nine-Tenths Saved**
of the cost of Electricity and gives as brilliant a light.

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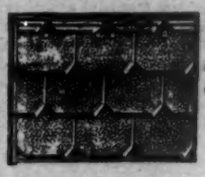

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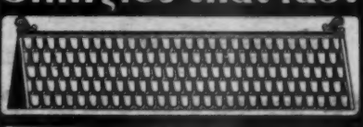

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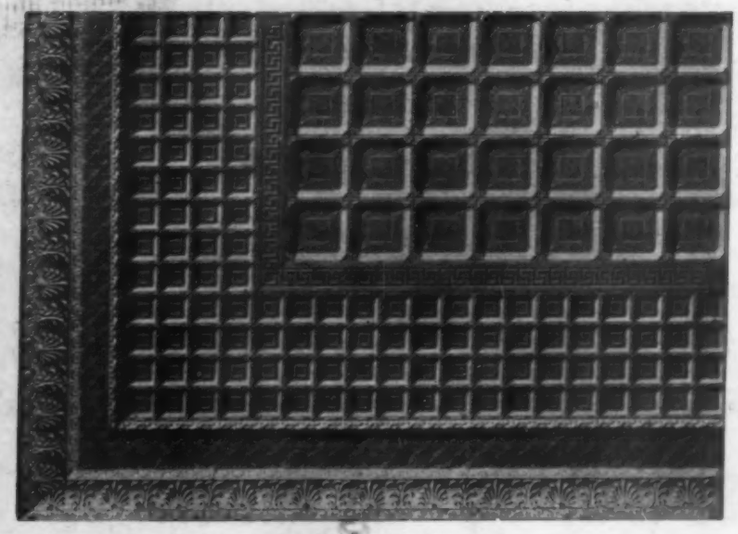

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**EASILY APPLIED TO OLD OR NEW BUILDINGS**

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32 POUNDS COATIN

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because MF Roofing Tin was the first practical metal roof covering ever made. The process is the same to-day as it was then, and the plates are just as even in gauge, thoroughly coated and easily worked. Therefore, when a property owner or roofer specifies MF Ternes, he can rest assured he is getting the best to be had.

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FRICK BUILDING PITTSBURGH, PA.

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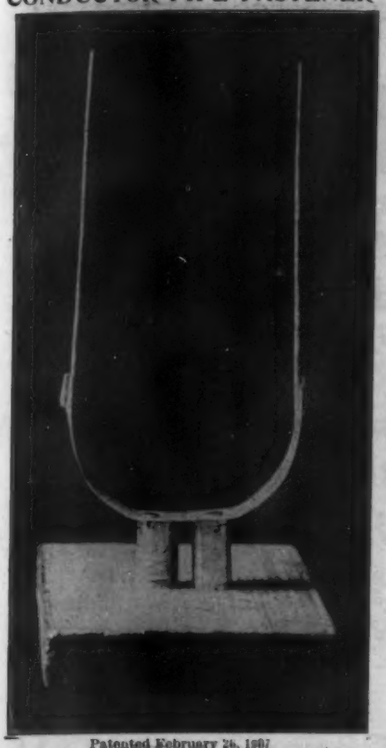

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No. 1 takes 2, 3 and 4 inch conductor.
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Fac-simile of the Trade-Mark stamped on each sheet of the "TARGET-AND-ARROW Old Style" tin. Registered in U. S. Patent Office.

TARGET AND ARROW Old Style roofing-tin is handled by all leading hardware jobbing houses throughout the United States.

Note that we now use the old name for the brand—"TARGET AND ARROW Old Style,"—rather than the words "Taylor Old Style," which have been imitated in every possible way by other tinplate houses.

Send for our "Guide to Good Roofs," giving arguments in favor of tin roofing.

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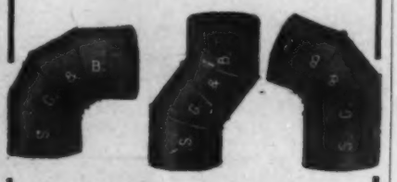
FIRST CLASS
ELBOWS MADE



Adjustable Elbows—neither too loose nor too tight. Indispensable in putting up eave-spouting, stoves and furnaces, where odd turns or angles are to be fitted. These elbows come in sizes ranging from 1½ to 10 inches; made of Charcoal, Planished or Glavanized Iron.
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that will not scorch or burn even the most delicate dainty sauce or gravy. Will not absorb grease or flavor. Does not get smeary, dirty, unsanitary. Always clean, sweet, hygienic. Never warps.
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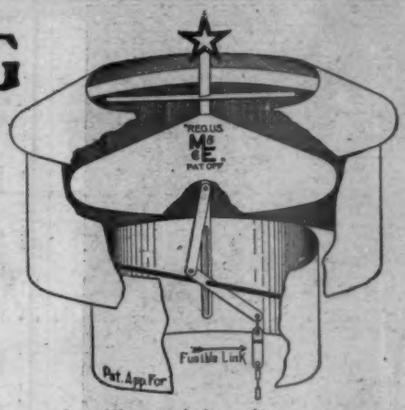
# *The* FIRE-RETARDING "Star" Ventilator




The Roof of this Ventilator is movable vertically, and is held in its highest open position by a lever movement, controlled by a fusible link. In case of a fire the link parts, and the top drops down by gravity, closing the opening.

The top is also a damper itself, as by regulating the chain length the opening is partially or wholly closable at any time, and still retaining its automatic closing feature in case of fire.

There we offer the

**Combination** { **1st. The Automatic Fire-Retarding "Star" Ventilator** / **2d. A Controllable Damper** } **All in One**

Hundreds of these Ventilators now in use. They are absolutely storm-proof, and our Ventilators have a proven speed of air exhaust in excess of any other made.

Can be supplied with glass top. Simpler and with fewest parts made. Also lightest in total weight, without sacrifice of proper gauge.

"Reg. in U. S. M&E Pat. Off."

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Successors to Merchant & Co., Inc.

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**HAVE YOU EVER HEARD OF A TARRED RAG ROOFING WITH A GUARANTEE LIKE THIS?**

**A PURE RE-HAMMERED CHARCOAL IRON BASE AND ALL THE COATING THAT CAN BE PUT ON IT**

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**Is the most wonderful cooking utensil and the best and most profitable seller ever placed upon the market.**

**¶ An extensive advertising campaign, embracing the use of all the best magazines read by over five million people, has awakened a wide public interest in the roaster.**

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**¶ Seamless, sanitary, self-basting.**

**¶ It is manufactured in four sizes from Lisk's celebrated Imperial gray enamel steel ware and is unconditionally guaranteed.**

**¶ If you do not handle it, send for booklet and prices.**

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**Canandaigua, N. Y.**

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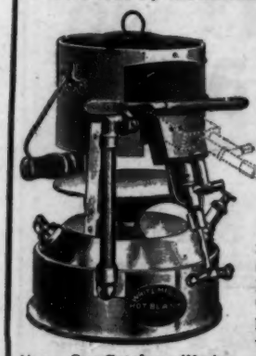
### The No. 39 Bonanza Furnace



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## Soldering Furnace

**AND YOU WILL MAKE NO MISTAKE**

**Always Ready—No Smoke—No Odor—No Noise—Unexcelled—Unequaled—Unrivaled—Safe—Sure—Durable.**

**GALVANIZED IRON, BRASS OR COPPER RESERVOIR.**
**Equipped with Cylindrical Slotted Burner.**

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**Burns With a Mixture of Air and Gas**

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**Requires No Soldering**

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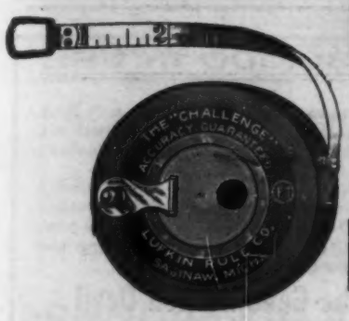


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COMMODE PAIL

is the only one having a latest improved closet seat which need not be removed when cleansing. Seat is on outside of body with braces riveted to side of pail. Made of galvanized iron painted and decorated in assorted colors or finished in white enamel. Packed one fourth dozen per crate.

Get a trial order from your jobber and we assure you, that you will buy none other. If you do not find them better than any made to-day, you may return them to us and we will pay your bill.

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Stick me on any house faucet and I will convince you that here is another **Red Devil** that will not trouble you, but will trouble flies, and keep the moisture off your brow.

**The Genuine Red Devil Water Motor Fan**

Ask your jobber for prices and catalog.

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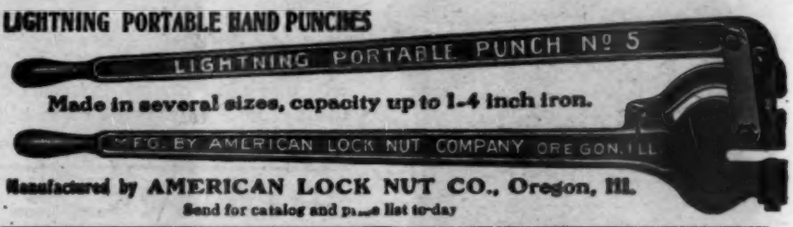


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**Manufactured by AMERICAN LOCK NUT CO., Oregon, Ill.**
Send for catalog and price list to-day

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Don't fail to add this to your stock.
SALES TO DATE OVER 1,500,000.

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FAMOUS FOR TEMPER AND CUT
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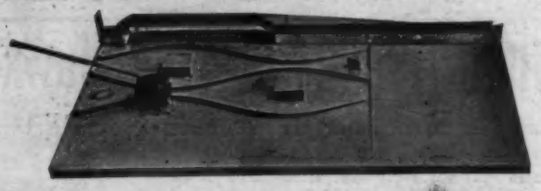

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We are the largest manufacturers of Benches in the World.

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So, Try, Try Again!
DUBY & SHINN MFG. CO., Inc.
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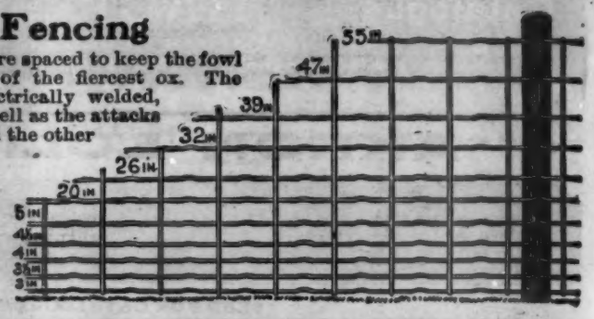
## For Field, Farm and Hog Fencing

are made to meet all the demands they are subject to. They are spaced to keep the fowl within their limits and are calculated to stand the strength of the fiercest ox. The wires and rods are of the best steel the market affords, electrically welded, and are galvanized so that they can resist the elements as well as the attacks of the curbed in animals. They are just as meritorious as all the other

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of Wire Rods, Annealed, Bright and Galvanized Smooth Wire, Barb Wire, Twisted Cable Wire, Fence Staples, Wire Nails, Steel Hoops, Bands and Cotton Ties. Dealers save money on goods.

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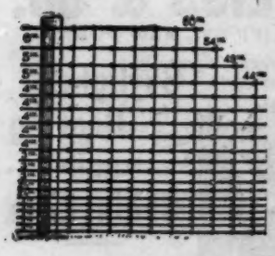


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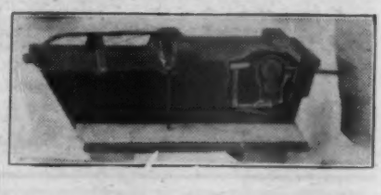

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We want one Hardware Merchant in each town as exclusive agent.

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Light, smooth, full measure and guaranteed perfect. Made from original patterns. Metal, the right kind in the right place. Ask your jobber for them or write us.

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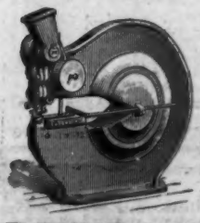

This Lever Punch is made any required size. It is a convenient tool for punching plates, bars or angles. We build a complete line of Shears, Punches and Bending Rolls, all sizes, hand or power.

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CAMBRIDGE CITY, IND.

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***Why You Should Use the Security Copper Tube Lightning Rod in Preference to Any Other:***

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4. It is the only Copper Rod that has a patented Coupling of Pure Copper, which makes the joint the strongest part of the rod.
5. It is held up off the building by a Galvanized Fastener and Galvanized Brace, not resting on the building to form a dam for water to rot the shingles.
6. It is furnished with the most complete and best outfit of fixtures, points, balls and vanes.
7. It is sold by responsible business men, who see that it is properly put up and kept in repair.
8. It has never failed to afford perfect protection from lightning and gives general satisfaction in every respect.
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Manufacturers of Hand and Pony Mowers, also Marine Gasoline Engines from 2 to 8 horse power.

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**That will kill all the weeds in your lawns**

If you keep the weeds cut so they do not go to seed, and cut your grass without breaking the small feeders or roots, the grass will become thick and the weeds will disappear. **The Clipper will do it.** If you wish Clippers, send in your orders.

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**A Full Line of Horse Nails**
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is the washing machine you need to supply the demands of your customers. SIMPLICITY in MECHANISM, HIGH SPEED and EASY RUNNING. . . .

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IMPROVED QUICK AND EASY RISING STEAM, ELECTRIC AND HAND POWER

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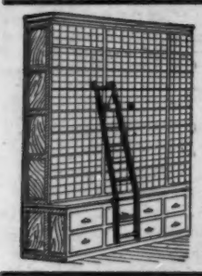

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Are made to fit all kinds of high shelvings, and are guaranteed to be satisfactory in every respect

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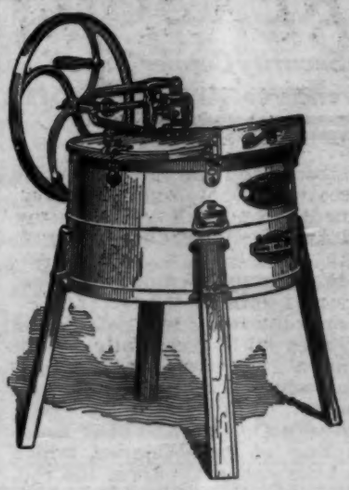

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We are shipping out 2500 Majestics each week. Write us for catalogue and prices.

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Manufacturers of Wooden Ware

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SELLS AND STAYS SOLD

There are more WHITE LILY WASHERS SOLD than of any other make of WASHING MACHINE.

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"American Twin"

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THEY ARE
Well Advertised,
In Demand,
Easily Sold,
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THEY EXCELL IN
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**THE BEST ICE CREAM FREEZERS** in practical use, because convenient, compact in size, use smallest amount of ice and salt, run easily, freeze quickly, produce smoothly frozen creams or desserts with little bother and less work

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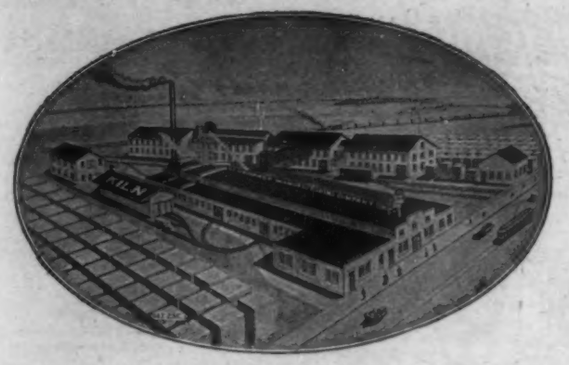

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For Family
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The grease passes through it instantly and leaves the food light and tempting. Easily cleaned. Made entirely of steel. A firm, cool grip. Will last a life time. Costs no more than a poor one. Our catalog contains some 400 good things, and can be had for the asking. Risk a postal card on it anyway.

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| | | |
|---|---|---|
| 212 x 215 | At Veedersburg, Ind., April 18, made by C. A. Young winning | High Average |
| 513 x 545 | At the Texas State Shoot, Mexia, Tex., April 24-26, by L. I. Wade, winning. | High Average |
| 48 x 50 | At the Texas State Shoot, Mexia, Tex., 4-26, by Mr. Carter, winning. | Chronicle Trophy |
| 50 x 50 | In the Individual Championship event he Texas State Shoot, April 24-26, by L. I. Wade, being the | Only Straight Score |
| 362 x 380 | At Chanute, Kan., April 19-20 made by Ed. O'Brien, winning | High Average |
| 113 Straight | By L. I. Wade, at Mexia, Tex., April 25, being the | Longest Run |
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All of the above scores were made with THE PERFECT AMMUNITION

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DISSTON **CHROMOL** HACK SAW BLADE

Made of Chromol Steel—A special high grade material peculiarly suited for metal cutting blades. The Teeth are MILLED in—making them clean and sharp, giving greatest possible strength. Hardened throughout underDisston Special Process.

Taking the CHROMOL SAW day in and day out, we guarantee it will DO more satisfactory work than any other hack saw on the market.

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**HENRY DISSTON & SONS, Inc.**
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**LIST PRICE . . . . . $15.00**

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This miter is made absolutely correct, true to shape, size, and bead, and the easiest connecting slip joint. Will save your time and temper. In case your supply house cannot furnish them, send your order direct to the

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**Manufacturers of Sheet Metal Specialties**

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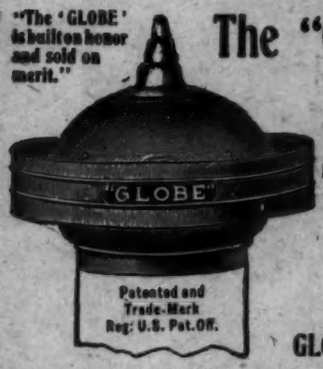
"The 'GLOBE' is built on honor and sold on merit."

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in COPPER, GALVANIZED IRON and with Glass Tops for Skylight purposes

**Absolutely Storm Proof**

**For Perfectly Ventilating Schools, Churches, Halls, Mills, Factory and Audience Rooms of Every Character**

**SMOKY CHIMNEYS CURED**

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**GLOBE VENTILATOR CO., Troy, N. Y.**

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**Saves** 80 per cent of room.

**Stronger** than a hand-made riveted thimble.

**Always Ready** to hook together.

**The Lug** is always on top and passes through two slots then tied. Does not interfere with the entering stove pipe.

**The ECLIPSE Nested Stove Pipe Thimble** is made of Galvanized Iron in sizes of 5, 6 and 7 inch.

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The superiority of
**SCOTT'S EXTRA COATED ROOFING TIN**
only ENDS with the coating. It BEGINS at the foundation—the BASE or BODY which in "SCOTT'S EXTRA COATED" is HAMMERED OPEN HEARTH.
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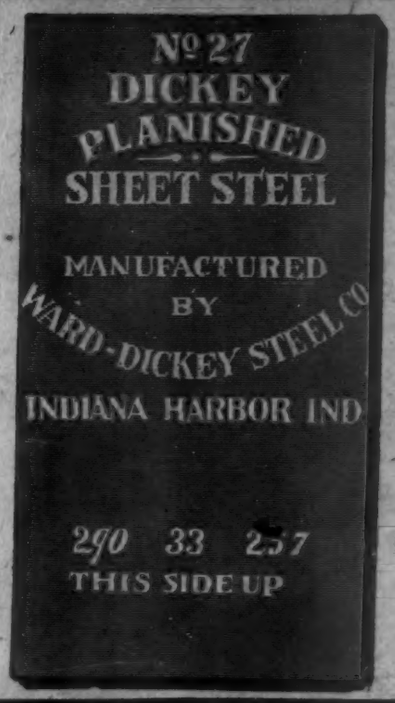


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*Busy Year*
*Have to anticipate wants*
*Don't get left*
*Rush is on*

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**Vitreous Enameling**

Designs and builds new plants. Improves quality and reduces cost in those already established.

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**if not COMPLETE with the**

**Be Thorough!**

**Star Expansion Bolt Co.**

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**THIS SPACE FOR SALE**

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**All Grades**
**All Styles**

**We are still making Low Prices.**

**Get our Prices on all Copper Boilers, also Stamped and Japanned Tinware, Gray Mottled and Blue and White Enameled Ware.**

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By advertising and using
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**Powers Automatic Chimney Tops**

They make chimneys draw, give tinners employment making stocks and give the dealers profit. Sold by Hardware Jobbers and Dealers.

Made only by
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Streator, Ill.
This cut free to dealers

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**RAIN-WATER CUT-OFF**

The strongest, most durable and cheapest CUT-OFF on the market.

The only single cut off made to fit **Corrugated** and plain pipe and which can be used without extra pipe or elbows. For sale by all leading jobbers.

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